

A HAND-BOOK
ON
FAMINE ADMINISTRATION
IN
NATIVE STATES.

COMPILED UNDER THE ORDERS OF THE GOVERNMENT OF INDIA
IN THE FOREIGN DEPARTMENT.



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A HAND-BOOK ON FAMINE ADMINISTRATION IN NATIVE STATES.

INTRODUCTORY.

THIS Manual is intended to supplement the instructions of the Famine Code for Native States and follows the same arrangement. It must be understood that it does not profess to be a complete and final authority on the matters dealt with in it. It in no way dispenses with, or supersedes, the Famine Code nor does it possess the same authoritative character. It will be impossible for any particular Durbar to carry out all the provisions of the Manual or to bring their administration of the different branches of relief into complete harmony with them. But, for the assistance of those charged with the administration of famine relief in Native States and of officers who have had no previous experience with the subject, an attempt has been made in the following chapters to give an account of the principles underlying famine administration, to explain the formal rules and instructions of the Code and to collect in a convenient form the results of the practical experience gained in recent famines.

CHAPTER I.

Measures to be taken in ordinary times.

1. The official best qualified to be the Central Officer is the one in charge of what is ordinarily known as the Revenue Department of the State. He is more in touch with the district executive officers than any other of the head-quarters staff and is presumably better acquainted with the resources of the State and the condition of the revenue payers. But whoever is appointed should possess both experience and judgment and should be sufficiently high in authority to give his recommendations and orders weight with the Durbar, the departmental and local officials and the people. Central Officer.

By the terms "Officers in civil charge of districts" and "District Officers" used in the Code and in this Manual are meant the executive heads of the revenue divisions into which a State is divided, such as Nazims, Wazirs, Kardars, Hakims, and so on.

2. Gazetteers of most of the States already exist, but they do not always contain either as full or as accurate information regarding the country and the people as they should. The extent and character of this information naturally varies very much in different States, but it should be everywhere possible to collect in a handy form sufficient material to enable the administration to form a correct estimate of the condition of the country and the people and so to determine at any time what measures are fitted for their development in ordinary years, for their protection against natural calamities and for their relief in a season of distress. In addition to statistics showing the amounts of cultivated waste and forest areas, the various sources of irrigation and the areas commanded by each, and communications, this material should comprise accurate returns of the rainfall in different tracts, of prices of leading food-grains obtaining at different periods of the year and of the grain traffic. There should be a rain-gauge in every dispensary and the Chief Medical Officer should supervise the registering and reporting of the rainfall. The prices of the leading grains current in the more important markets at different seasons should be periodically registered. Arrangements should, if possible, be made with the railway authorities to supply regular reports of the rail-borne trade in food-grains. Economic account of State.

3. It is most useful for district officials and the Central Officer to take stock regularly of their charges in order to secure that they shall not miss the earliest warnings of impending trouble. By being forewarned they will not unfrequently be able to take precautionary measures which will save much trouble and expenditure later on. The reports and forecasts prescribed in sections 3, 5 and 6 of the Code, if carefully and intelligently compiled, will go some way towards establishing an efficient system of intelligence. Periodical Reports.

Relief works
programmes.

4. When famine is declared, nothing is of greater assistance both to the administration and the people than a useful workable programme. If this is not ready before the signs of famine appear, works have to be hastily discovered. They are imperfectly planned and are organized so rapidly that there is much useless expenditure, while the relief to the people is much less than it would otherwise be. The large works should be reproductive if possible and should be of permanent utility or such as commend themselves to the Durbar. They should be large enough to justify the supervision of a responsible official, and they should be so distributed that some portion of each work may, if possible, be situated in, or near, each administrative division liable to famine. Among the most suitable kinds of large works are irrigation projects of all kinds and the construction of feeder roads for railways. Railways are important works and are generally adapted to give a large amount of employment, but they should not be taken up except as a last resort because of the large financial liability the commencement of the work involves, the small ratio which the expenditure on unskilled labour bears to the total cost and the risk of loss should the alignment be subsequently altered.

The programme of village or town works is quite as important as the other. Such works are useful for the employment of those whom it may be inexpedient to draft to a distance, for keeping people together in the earlier stages of distress, as reserves in case of an outbreak of epidemic disease, and towards the end of a famine when it is so necessary to get the people back to their homes. These works would include small tanks, embankments, reservoirs, village roads, drainage and other sanitary projects, well-sinking, the collection of wood, grass and fodder, spade cultivation in tracts where the cattle have died, reclamation of waste land, building, and the extension of industries for the artisan classes. This list is not exhaustive, and in every State the experience and ingenuity of local officials and leading residents will suggest others. When famine is pronounced, such works can never take the place of the large schemes which must almost invariably form the backbone of the relief measures, but they are of the greatest value as supplements, they are usually more economical and easy to control, they prevent the dislocation of the social and domestic life of the village and they are much more popular with the people. There should be two distinct classes of smaller works: (a) those to be carried out under official supervision, but in the construction of which local and gratuitous Civil agency will, as far as possible, be utilized, the whole cost being debited to the Durbar; and (b) those constructed entirely by individuals or communities, the cost being borne partly by the Durbar and partly by individuals and communities or entirely by the latter.

The important point in connection with all programmes is to estimate the total number of persons for whom relief would be likely to be required in the event of a serious famine and to ensure that the programme is sufficient to provide for this number and for a reasonable margin over. It is extremely difficult to form the necessary estimate of the number which may require relief, for many considerations affect it, *e.g.*, the readiness of the people in times of scarcity to migrate to more favoured tracts in search of labour, the growth of population, and the history of past seasons. The last is in reality a most important point, for an estimate, which for one year might be ample, might be totally inadequate if conditions went from bad to worse during the following twelve months. An arbitrary percentage on the population of a district should never be taken as forming a reliable guide.

In annually revising them due regard must be given to the increased protection, if any, afforded during the previous 12 months by the extension of irrigation, improved communications and any other development of the tract, to a decline in security, if any, caused by a deterioration of the resources of the tract or of the staying powers of the people, and to the exhaustion, if any, of relief works since the last revision.

Relief circles.

5. It is important to mark out relief circles in ordinary years in anticipation of the need. The internal organization of the various States differs so much that it is impossible to indicate what particular administrative units should be selected as relief circles. But as a rule no one circle should contain more than 20,000 persons. Where famine is likely to occur, the first thing is to ensure that the earliest information as to approaching danger may be available and to have all preparations ready beforehand. The proper working of the circle system depends almost entirely upon the men selected as Circle Inspectors. In this connection great weight must be attached to the employment of non-official agency, whether in the country or the larger towns. The more this agency is used the more useful it will become.

Duties of Circle
Inspector.

6. The duty of the Circle Inspector is principally concerned with village inspection and the distribution of gratuitous relief; the former is essential at all stages of famine, but particularly at the outset. It is the best source of information as to the extent of distress; it puts heart into the people; it enables the Central Officer to take risk without anxiety, and to regulate with confidence the flow of relief; without it individual selection for relief cannot be properly worked.

It should be the special duty of the Circle Inspector—

- (1) to make himself acquainted with every village in his circle and with the circumstances of each household in every village, so far as may enable him to judge of the ability of its inmates to withstand distress;
- (2) to stimulate land-owners to employ labour, especially on the construction of wells, tanks, and similar improvements, inviting applications for advances for the purpose if necessary;
- (3) to make known the places at which, and the classes of persons to whom, relief works are open, the nature of each work, and the wages offered, and to encourage persons in distress to go to such works;
- (4) to prepare lists of persons who are ineligible for relief on works;

- (5) to report whether further means of relief are required and, if so, to what extent ;
- (6) to assist in the management or control of village works ;
- (7) to initiate, promote, and control measures for gratuitous relief ;
- (8) to visit each village in his circle as often as the District Officer may direct, to test, by frequent personal inspection, the list of persons entitled to gratuitous relief, and to ascertain that relief has been distributed in the manner prescribed ;
- (9) to relieve any starving persons wandering in his circle until they can be sent to a relief work or a poorhouse or placed on the register of gratuitous relief in their own villages ;
- (10) to report immediately the appearance of immigrants or a tendency to wander on the part of the people of his circle ;
- (11) to report all deaths from starvation in his circle ;
- (12) to assist in the management of State kitchens or poorhouses established in his circle ;
- (13) to report immediately the occurrence of any unusual sickness among men or cattle in any village in his circle ;
- (14) to keep correct accounts of all expenditure incurred by him or under his orders and to submit these punctually.

CHAPTER II.

Measures to be taken when scarcity or famine is imminent.

7. The chief premonitory symptoms of distress are as follows :—

First signs of distress.

- (a) Unusual conditions of season and particularly failure of the rainfall. The rainfall over any tract should be carefully watched. The rain may fail altogether or may be unequally distributed. Again, the total fall may not be deficient, but may be so concentrated that it is expended before the season is sufficiently advanced.
- (b) Fluctuations in prices. If prices rise by more than 20 per cent., the causes should be inquired into, as there may be special reasons for the movement apart from scarcity. One sign of the upward movement being due to the apprehended failure of the local crops is that the quotations in the nearest large grain market will be found to be lower than those obtaining in the villages.
- (c) Undue contraction or expansion of private charity. The less wealthy of the charitable members of the community usually reduce the amount of their alms in self-defence, while those with whom money is more plentiful find themselves forced by humane motives or by importunity to extend their sphere of charity.
- (d) The contraction of credit and the scarcity of industrial works of all kinds.
- (e) Feverish activity in the grain trade. This is shown as much by abnormal exports as by abnormal imports, as sometimes dealers and even officials attempt to make a corner in grain.
- (f) Marked increase in crime such as dacoity and thefts of grain and stores.
- (g) Unusual movements of flocks and herds and the unusual influx of strangers or emigration of residents. In some parts of India migration of men and herds takes place in ordinary seasons, and, so long as it remains within the usual limits, this does not call for action. But the wandering of masses or groups of people, who are not in the habit of migrating, is a sure sign of distress.
- (h) Unusual mortality among the cattle. To some extent these various signs may be deceptive, but they cannot be neglected and call for the utmost vigilance and activity on the part of the officials.

8. If it should be decided that the signs are unfavourable and that action is necessary, the first question to decide is the order in which relief measures should be undertaken. The first act of the Durbar should be to review the financial position and appropriate the necessary funds. Arrangements should then be made for the collection of establishment—administrative, executive, and sanitary,—and for the distribution of tools and plant. Orders should then be given as to where relief works should be opened and what their character should be, and what other remedial measures should be organized.

Very early enquiries should be made regarding the suspensions required and, if it is found that this form of relief is necessary, the Durbar's orders should be published and widely made known as soon as possible, and in any case before the first instalments of rent or revenue fall due in order that the people may know how they stand. If the failure has been general over a large tract, the suspensions may be made by villages. The circumstances of different States and divisions of the same State vary so much that it is impossible to lay down any rule as to how the amount of suspension is to be proportioned to the extent of failure, but the following scale will usefully serve as a general guide :—

4 annas loss of produce	No suspension necessary.
6 " " " "	2 annas suspension.
8 " " " "	4 " " "
10 " " " "	8 " " "
12 " " " "	12 " " "

It is of cardinal importance to relieve the cultivator, whether he is responsible for the revenue himself or is only a tenant. If the latter, the Durbar should order the landlord to suspend the rent in the same proportion as the revenue has been suspended.

Much subsequent distress can be averted by a liberal distribution of advances for digging wells, the construction of other petty irrigation works and so on, both as a means of employing labour and of securing the crops. These advances also give great confidence to the people and stimulate local credit.

Duties on grain.

9. It is most important to abolish all duties and taxes which interfere with the free movement of grain; such checks to trade still exist in some States and their abolition may not everywhere be easy to accomplish, but their temporary suspension in times of distress need not raise any difficulties and can be productive of nothing but good. It should also be recognized that in some of the larger States with powerful Thakurs or Jagirdars the latter must follow within their own jurisdiction the lead of their Chief when he abolishes or suspends those checks in the *khalsa* area. In this connection the Durbar should bring home to them their responsibility in a time of distress, and one of the best means of doing so is to lend them the means of enabling them to take their proper share in the relief of their people.

Speculation in grain.

10. Experience has shown that sometimes officials are tempted to embark in grain speculation, particularly in the opening months of a widespread famine. It is not always easy to discover the practice when it exists, but when discovered it should be very sternly repressed. When officials, who have to do with the administration of relief, personally interest themselves in the purchase and sale of grain, the results are disastrous both to the people and to the Durbar.

Non-agricultural industries.

11. One of the earliest results of marked scarcity is that the non-agricultural industries suffer. Apprehensive of the future, the majority of people will not spend money on building, or furniture, or clothes which they can possibly do without, and the artisans and petty manufacturers suffer accordingly. Much can be done to help these classes and keep them off the relief lists if the administration will anticipate the future requirements of the different departments of the State in the way of, for instance, buildings and stores.

State import of grain.

12. Where the State is well provided with communications, it will rarely be necessary for the Durbar to move supplies in bulk from one place to another. But where there are tracts remote from the railway and in a backward state of development, arrangements must be made for a regular supply of the necessities of life.

Help from money-lenders.

13. The Mahajan class have generally shown themselves sensitive to the sufferings of the cattle in a famine and both individually and collectively have spent large sums for their preservation. It is most important that such efforts should be openly assisted by the Durbar. It will not be always necessary that this assistance should be in the form of a money grant. Moral support and encouragement will do a great deal.

It will often be found possible to encourage the *sahukars* to give liberal advances to their clients. The Durbar can practically guarantee these advances by giving assurances to the *sahukars* that they will be allowed official assistance in recovering famine debts without having to file regular suits, and that the recovery of these sums will be permitted before any attempt is made to collect the State revenue.

Test works and poorhouses.

14. The right development of the relief system hinges on the proper use of test works. Their object is not to relieve famine, but to test the presence of it, not to appease hunger but to find out whether the people are hungry. Ordinary works in progress should be utilised or opened as test works. The power to open them should rest with the Central Famine Officer, and, if possible, they should be managed by an officer of the Public Works Department. Full tasks should be exacted. In no case should power be given to earn more than the normal Code wage. Labour should be the only test; neither a distance test nor compulsory residence should be imposed. Complete muster rolls should, wherever possible, be carefully maintained in order to show the proportion of sexes and classes coming to them.

The object of poorhouses is to collect and receive paupers sent adrift by the contraction of private charity. These all gravitate towards the towns, and these institutions should, therefore, be opened at the large centres of population, whether these are in the middle of an affected area or not.

Wandering.

15. Wandering is usually regarded as a certain sign that famine has begun; but it is necessary to discriminate between two kinds of wandering. In hard times, not amounting to famine, the contraction of village charity sends adrift the regular paupers: such wandering is properly, and may be completely, provided for by the establishment of poorhouses at central places, if, indeed, private charity, organised or independent, does not afford sufficient relief. Again, in parts of India migration of men and herds takes place in ordinary seasons and, so long as it remains within the usual limits, this does not call for action. But it may be laid down as a general rule that any unusual or aimless wandering of men or herds in search of food or water is a sure sign that famine has already begun and that relief is urgently required. To anticipate and prevent the wandering of paupers and individual labourers is impossible without presuming the existence of famine before it has been proved, but the greatest vigilance is necessary to stop even wandering of this kind before it goes too far; while the wandering, in masses and groups, of people who are not in the habit of migrating, is a certain sign that relief has been too long delayed in the places from which they come.

Central Officer's report.

16. As soon as it has been decided to start test works, the report prescribed by section 15 of the Code should be submitted without delay for the information of the Durbar. For the purposes of this report it is necessary to estimate the area and population which is likely to be affected and the numbers for whom it will be necessary to provide in the various forms of

relief. This estimate is quite different from that already referred to in connection with the programme (Section 3 of the Code) and must be framed with reference to the actual prospects and after detailed local enquiry. The basis of the estimate should be a return prepared by the Circle Inspector under the supervision of the District Officers, and in conjunction with the village officers, showing for each village—

- (1) the probable number of persons who will require relief on relief works, with detail of men, women, and children; and
- (2) the probable number of persons, with the same detail, who will require gratuitous relief.

Having come to a conclusion as to the probable number of persons who will need relief, an estimate must be made of the length of time during which relief operations will be necessary, and of the probable prices which will prevail. With these statistics and those for the last previous famine the Central Officer is in a position to estimate the probable expenditure which will be entailed.

17. The Famine Commission of 1901 came to the conclusion that the inability of railways Railways. to carry all the food and fodder that was offered affected prices in the famine districts and resulted in the loss of large numbers of cattle. The Government of India have recently ruled that this failure to meet the requirements of famine transport was "due rather to general unpreparedness to cope with the sudden and heavy demand made upon them than to insufficiency of rolling-stock." They "are of opinion that much may be done to avoid the difficulties experienced in the past famine by the exercise of foresight and by timely preparation for any emergency on the part of the railway authorities working in conjunction with civil officers." Section 16 of the Code provides for the communication of early information to the railway administration and for a consultation as to the best measures necessary to prevent a congestion of traffic.

As soon as famine is seen to be imminent, a meeting should be held of railway officers and of the Central Officer and the heads of affected districts. This meeting should discuss the probable nature and extent of the unusual demands likely to be made on the railway. Attention should be specially directed to the localities in which the scarcity is likely to occur, the date from which an unusual demand for import is likely to arise, the nature of the demand, whether for food-grains or fodder, and the probable sources from which supplies will be obtained. The leading traders and grain dealers will be able to give valuable information in their own interests as well as those of the Durbar.

CHAPTER III.

Declaration of Distress and commencement of Relief.

18. The extent and character of the powers and responsibilities of the Central Officer and Duties of Durbar officials. the Civil and Departmental officers must necessarily vary much in different States. The main principle to be followed is that the Central Officer is, as being directly in touch with the Durbar, in charge of the general control of famine relief measures throughout the State. District Officers are responsible for the condition of their districts and people, for the proper organization of the small village works and for the various miscellaneous measures of relief, while Departmental officers are responsible for all the arrangements on the relief works committed to their charge.

19. The loss of a single harvest or even of the harvests of a year will rarely of itself Preparation. produce conditions necessitating measures of relief. There usually must be a succession of lean years; consequently one ought never to be taken unawares. If there have been one or two bad years and then the monsoon fails, anxiety is bound to be felt. The failure of the monsoon may mean either that the *khari* crop cannot be sown or that, if sown, it cannot be matured. The latter case is really the more unfortunate, as then the people lose their seed and most probably are unable to put in a *rabi* crop. Usually the failure of the *khari* means also the failure of the following *rabi* crop. When the rains fail therefore and anxiety is felt, early steps should be taken to ascertain as accurately as possible the real condition of the district and the people. At such a juncture 'moral strategy' is of immense importance. There is no greater evil than the depression of the people. It is hardly possible to overstate the tonic effect upon them of early preparations, of an early enlistment of non-official agency, of liberal advances in the earliest stages and of early action in regard to suspensions of revenue.

It is necessary to take a certain amount of financial risk. The money spent in preparation may, indeed, be wasted, but the loss is trifling compared with the loss which want of preparation entails.

20. At this stage private enterprise should be stimulated as far as possible and land-owners Development of private works. and others should be encouraged to start works of improvement and utility on their estates in order to create a demand for labour.

21. Advances to agriculturists for improvements, especially for the construction of *kachha* Temporary wells. wells and the repair of old wells, should be freely given on liberal terms. The only sure preventive of scarcity is perennial irrigation. This may be from canals or wells. While it is an

important duty of all District Officers to help in the extension of the former, the encouragement of well irrigation falls more particularly within their province. Here a distinction must be drawn between *pakka* or lined wells and *kachha* or unlined wells. The latter are of a temporary nature and rarely last more than two or three years at the most, whereas the former permanently increase the power of resistance against famine of the tract in which they are situated. In the present connection the former only are alluded to. Of course well sinking has its limitations, for ordinarily it does not pay to irrigate from a well which is more than 60 feet deep, but if wells even up to 80 or 90 feet deep exist, though they may not be ordinarily used for irrigation, they are of inestimable value in a dry year and will mature a sufficiency of crops to keep the cattle alive and the family, or perhaps three or four families, together. As a matter of fact, in such circumstances three or four families would nearly always club together, as it takes six or even eight yoke of oxen to work the well, and one family would rarely possess so many. Where therefore good water can be found within a depth of 80 or even 90 feet of the surface in a tract dependent on the rainfall, every effort should be made to stimulate the making of *pakka* wells by the offer of loans on liberal terms where necessary. A *kachha* well takes on an average a month to dig and fit up, and so, as the great reason for giving advances for their construction is to enable a certain amount of *rabi* crops to be grown, it is of the highest importance that the loans should be given sufficiently early to allow of the well being dug in time to water and plough the ground before the season for sowing for the winter crop is past. The well should, if possible, be ready to start work by the end of October or the middle of November, and as the fate of the monsoon may not be known before the commencement of September, it is clear that there is no time to waste over preliminaries and the Tahsildars should be ordered to expedite them in every way in their power.

Relief
operations.

22. Relief operations fall under the following main heads:—

I.—Works—(a) Public, *i.e.*, under the control of the Public Works Department.

(b) Village—(i) non-departmental.

(ii) private, aided or unaided.

II.—Poorhouses.

III.—Gratuitous relief.

These are all described in the following chapters.

One of the great secrets of good famine administration is continuous inspection by all officers concerned. Officers of the Public Works Department will of course mainly confine their attention to the works under their control, but they should at the same time keep their eyes and ears open and bring anything connected with any branch of famine administration to the notice of the Central Officer which merits his attention. He is required to inspect works under the Public Works Department as well as other branches of relief. When inspecting a work under the control of the Public Works Department, however, a Civil officer should remember that the Engineer is in executive charge of the work, and that ordinarily no orders should be issued with regard to the conduct of it except through him. A Civil officer, especially if he is a subordinate, should never interfere except in case of urgency or to rectify some glaring abuse. Cordial and close co-operation between officers of both departments should always be cultivated. In order that all works, poorhouses, villages, etc., should receive proper attention from inspecting officers, it is recommended that each officer should keep a record of his inspections in a form somewhat like the following:—

Name of work, poorhouse, or village.	Dates of inspection.						

Circle Officers.

23. On the declaration of distress the regular and methodical work of the Circle Inspector will begin. His duties are described in paragraph 6 above; special care should be taken to see that where private charity is non-existent all those entitled to gratuitous relief do really get it, and at the same time the greatest strictness should be observed in its administration. It must not be assumed that if this form of relief is effectively organized the need for poorhouses is removed.

The importance of careful and regular village inspection is very great. It will prevent the Durbar being suddenly taken unawares by a rush of people on to the works and will prevent much unnecessary suffering and mortality and much expenditure of money without any return for it. No effort should be spared in the selection of good men as Circle Inspectors. Men in permanent employ in other departments should be freely used, but officials accustomed to sedentary work do not make good Circle Officers.

24. The conversion of test works into relief works is very simple. It consists merely in the addition of relief to dependants. No other change has to be made. Conversion of test works.

CHAPTER IV.

Famine Relief Works.

25. There is frequently a tendency at the outset of a famine to curtail the normal operations of the engineering department of a State. Such a policy should not be adopted except for strong reasons. It may happen that it is necessary to draw on the current public works budget to meet the expenditure on famine or that, owing to a lack of qualified men, the permanent establishment have to be employed on the work of relief. But if it is possible to continue, and even to expand, the ordinary public works programme, the artisans and other classes, who depend upon it for employment, will be kept off the famine works proper, the strain on the famine organization will be proportionately lightened and the exhaustion of the relief works programme will be delayed. There are few States in which a sufficient number of projects can be found suitable for famine labour when the period of distress is prolonged. And it is better to carry on the ordinary public works in the usual way than to close them altogether at the beginning of a famine and be forced to open them later on when all suitable works have been exhausted. Ordinary works.

26. Before discussing the different kinds of relief works detailed in section 28 of the Code, it is necessary to summarize the leading principles on which recent experience has shown the selection, distribution and organization of relief works generally should be based. These principles are the outcome of a very wide and varied experience and are in harmony with the recent instructions of the Government of India. Selection and organization of works.

(1) It is not possible to fix precisely the area which a work may be expected to serve. The question hinges on the density of the population, on the character of the people, and on the previous famine history of the tract. If the people are habituated to famine or prompt to take relief, the number of works may be comparatively few, while if they are strangers to famine and reluctant to come on works the number of works should be comparatively large, at any rate in the early stages of famine or until the general reluctance breaks down.

(2) The exaction of a distance test is generally inadmissible. The test is easily evaded and is open to other abuses when distress is light. It is quite unsafe when actual famine prevails. It may be employed in exceptional cases, but then only when village inspection is effective and the gratuitous relief system is in sound order.

(3) Selection should not be attempted unless there is a sufficient staff with local knowledge at its disposal to deal effectively with individual applicants. It should, moreover, be confined to applicants who live within a distance of 4 miles from the work. Orders of admission, again, should be refused only to persons who have not come to the end of their resources. The main point is that, in the case of public works, anyone able and willing to work and those unable to work, but dependent on them, coming from a distance of over 4 miles from the work and applying for relief are eligible; but in the case of people living within 4 miles of a public work, or applying for relief on a village work, only those are eligible who have come to the end of their resources, that is to say, persons who possess no money or grain, have lost their credit, and who could only raise money by selling their plough bullocks or the implements of their craft. It will be seen, therefore, that in the case of relief works the system should be one of exclusion by selection, and, where the staff has not the local knowledge or for any other reason the process of selection is not complete, the opening of a relief work must not be delayed.

(4) Compulsory residence on the works should not be enforced. It necessitates a large staff and elaborate and expensive hutting arrangements and is dangerous when an epidemic of disease breaks out. It deters, moreover, the respectable classes from seeking the relief they need.

(5) Drafting to distant works is dangerous, and open to objection in other ways. It is legitimate only when it is designed to take the workers to more useful or fresh employment or to avoid infection.

(6) The only way to secure efficiency on works and to ensure economy is to have a capable staff and to exercise strict discipline and control over them.

27. As a general rule departmental works will be found to be the most convenient and most successful means of affording relief in the shape of labour, and, even when the circumstances of the State or of the affected tract are such that village works are more suitable, there should always be one or two departmental relief works both as an alternative and as a safeguard. Apart from the question of the practical utility of the different kinds of works—a question which can be decided only by the Durbar itself—it is undoubted that earthworks lend themselves most readily to the employment of famine labour. Works suitable for relief.

It is of the highest practical importance to select simple earthworks which are concentrated enough to admit of close supervision, which afford work in large quantities, which do not require very much laying out and which have a reasonable length of "lead." This last consideration is most important, as the constant difficulty is to find work enough for the undue proportion of carrier which always exists. The longer the "lead" is the more effective are the results and the more economically is the work done. Tank excavation is about the most ideal relief work. Next to that is the excavation of a canal or a wide ditch where there is a great

deal of work per foot run and where the earth has to be carried well away. Next to these is the construction of a heavy railway embankment formed from deep burrow-pits at a good distance off. Last of all comes the raising of an unmetalled road. Kankar collection and stone breaking are excellent where they are practicable.

Village works.

28. The value of village works compared with that of large works will vary much in different States and in different tracts of the same State. They have many advantages over the larger works. They are more economical, more useful, less exposed to outbreaks of epidemic disease, more easy to control, less likely to loosen moral and domestic ties and are less open to the objections of interference with the labour market, of neglect of agricultural dwellings and stock and of hindrance to the early resumption of agricultural pursuits. The Government of India have accepted these conclusions and consider that village works should form a more prominent feature of famine relief programmes than has hitherto been the case, and that in localities offering adequate scope they should be regarded as the principal means of famine labour, public works being opened merely as a safeguard against a breakdown of the village organization for the relief of wanderers. It is clear though, that, as far as most States are concerned, village works can never be made the backbone of the relief system in a severe famine. The number of such works is limited and a single famine would probably exhaust them completely. It is, moreover, imperative that a sufficient number of them should always be available in case of emergency such as when cholera becomes severe, and it is advisable to avoid having large camps and large numbers concentrated on public works, and also village works will usually be required when the rains are approaching and the people must be employed in the neighbourhood of their homes so that no time may be lost in setting them to plough and sow when the rains break. If so lows, therefore, that, at the commencement of relief operations when it is probable that they will have to be undertaken on an extensive scale, large public works should be generally relied on.

Establishment on works.

29. Every effort should be made to secure full and efficient establishments for the conduct of public works and accordingly special attention should be given to their preliminary training. When starting the first works, it may often be difficult, if not impossible, to appoint any men who have had any previous experience of famine works, but if any such are available, they should, if otherwise suitable and available, be invariably chosen. Everyone must work hard until the system is completely mastered, and then extra staff should be entertained and put in training on a work in progress where the organization is good, in order that they may be ready to start additional works as occasion may arise. The number of men in training must of course depend on the number of new works which will probably be required, but at least one complete staff for a new charge should ordinarily be in training. Even if no new charges are likely to be opened, it is always advisable to have a certain reserve of establishment in training to fill gaps caused by the illness, dismissal or the resignation of men already employed.

Gangs.

30. Relief workers will be made up into gangs of from 50 to 100 "workers" under a mate chosen by themselves. Their dependants will probably number from 20 to 25 persons, mostly children. Five such gangs should be formed into a party under a clerk or jemadar. Twelve such parties will form one relief charge under an Officer in Charge as described in section 34 of the Code. A charge will thus contain approximately 5,000 workers. If the number exceeds 6,000, a fresh charge should be opened. The new charge may be on a different part of the same work or on some other work at no great distance, but it should have its own equipment and establishment complete. This is an important point. When there is no charge system, the people idle and get out of hand, the Durbar money is wasted and when disease makes its appearance the whole organization breaks down. To keep the workers up to their work and guard them from panic requires the constant efforts of an establishment to whom they are accustomed and who understand them. In making of gangs and setting them to work the wishes and prejudices of the people should be consulted as far as possible. It is most important that weakly people and weakly gangs should be leniently tasked. Difficulties will often be found in making up such gangs as the people may not like to be separated from their friends. In such a case they may be allowed to remain with the ordinary gangs, but should be given reduced tasks.

Establishment of a "charge."

31. The establishment for a charge will necessarily vary in different States, but the following scale for a full charge of from 5,000 to 6,000 men will be found a good guide:—

One officer in Charge.	One store-keeper.
Two work agents.	Four to ten chaukidars.
Seventeen clerks or jemadars.	Four to ten sweepers.
Seventy to eighty mates.	One cashier.

The duties of the Officer in Charge are summarized in the Code. He is responsible for everything that goes on on the work. The duties of the work agents are to take charge of the tools, to lay out the work in advance, to have profiles ready where necessary, to measure up the work and to calculate the wages according to the work done. One of them should be a trained official of the engineering staff. Two men are necessary: one to lay out the work well ahead and one to measure up the work performed. It is advisable to have from the very outset a certain number of work agents to supply the inevitable demand later on. Clerks or jemadars may be selected from the State troops or from any of the branches of the Civil administration. They keep the rolls and, where wages are paid in cash, make out the wage papers and disburse the earnings. One should be put in charge of the water arrangements and another in charge of the feeding of dependants. Mates will be appointed by the Officer in Charge. One should

be in charge of the gang of from 10 to 20 men that lays out the work under the work agent, one should be in charge of the water and another should control the sweeper gangs. A blacksmith and carpenters are required for the repair of tools.

The number of mates in charge of working gangs will vary with the size of the gangs. It will be found advisable not to make up the full number of gangs in a charge at the outset. Two or three skeleton gangs should be made up in order to meet a rush on the works and so prevent disorganization later on.

52. The number and character of tools and plant required for a full charge of from 5,000 to 6,000 workers will vary with the nature of the work and the hardness of the soil. But for ordinary earthwork where none of the workers supply their own tools the following table is given as a guide :—

Tools and plant.

Name of article.	Number required.	APPROXIMATE.		REMARKS.
		Rate.	Total cost.	
		R	R	
<i>Phaorahs</i> or <i>kodalis</i>	2,000	1·5	3,000	
Picks and pickaxes	500	1·5	750	
Axes	10	·6	6	
Small flags for gangs, etc.	300	·1	30	
Baskets	6,000	4·0 per cent.	240	
Iron buckets for drawing water	20	·7	14	
Kerosine tins with handles	200	·5	100	
Five-foot measuring sticks	100	·1	10	
Fifty-foot measuring tapes	3	4·0	12	
<i>Munj</i> string	1 maund	10 0	10	
Staff pils 8' x 10'	3	35 0	105	
Pernanganate of potash	2½ seers	3·0	9	
Stationery, etc. . . . .	...	.....	20	
TOTAL . . . . .	...	.....	4,306	

The proportion of picks to *phaorahs* will depend on the hardness of the soil. In very soft soil the whole of the tools should be *phaorahs*. In stony or hard soil the picks may have to be twice as great or more, and then the *phaorahs* will be correspondingly less. If the work is stone breaking or kankai collection, sledge and breaking hammers and some crowbars should be substituted for the *phaorahs*. There should be reserves of tools and plant at all important centres.

53. The requisite tools and plant should, as far as possible, be procured from within the State. The artisan class feel the famine as soon as any other and should be employed on their own trades wherever this can be done. When tools are imported, money leaves the State and does not return. The probability also is that the neighbouring States are in want of tools and the demand becomes so great that prices rise to an abnormal height. Baskets can usually be made by some or other of the State subjects. Basket-making forms a useful kind of employment for persons in receipt of relief at their homes or in the poorhouses. If baskets are not available in any large numbers, kerosine tins cut in half make an excellent substitute and in some States broad basins made of iron or hide may be used with advantage. The wear and tear of wicker baskets on a relief work is enormous and, when famine is general, the supply is frequently not equal to the demand.

Source of supply of tools.

54. If wages are paid in coin, the arrangements for its supply must be complete before the work is opened. On a full charge the expenditure will amount to about R375 a day. The Central Officer should arrange to start each work with cash and watch the daily reports carefully for a few days. He will soon see how things are going and will then arrange to send enough money for each week's expenditure a day or two before the preceding week expires. A very large supply of copper coin will be wanted at the outset and after a few weeks it will circulate freely.

Supply of cash.

55. The health of the persons on a relief work depends chiefly on the purity of the water. Four wells should, if possible, be selected for each full charge, of which two will ordinarily be in use at one time, the other two being kept in reserve. Where caste prejudice is strong, it may be necessary to have three wells for use at one time—one for Mussulmans, one for the higher Hindu castes, and one for the lower castes. No one should be allowed to do any washing at the wells containing the drinking supply.

Water-supply.

Some respectable cleanly man of high caste should be appointed foreman of the drinking supply arrangements. Men of high caste should be attached to each well, four for day work and two for night work. They will act as guards in addition to their duties as drawers of water. No other person must ever be allowed near the wells. If they have not sufficient authority to deal with a rush, it may be necessary to make use of State servants as guards. Each well should be supplied with buckets of local shape for drawing, and kerosine tins for carrying, the water.

56. The actual distribution is most readily effected by utilizing the common method of *piaos* or drinking places. These should be distributed in the manner most convenient for the

Distribution of water.

workers. The water should be carried to the *piaos* in kerosine tins which require to be strengthened by an iron strap round the top and furnished with an iron handle. Half of the top should be cut away and hinged on again to prevent water being spilt in transit.

At the *piaos* the water should be stored in tanks, barrels, or large earthen vessels. If iron vessels are used, arrangements should be made to keep them as cool as possible.

The water will be distributed at the *piao* to the people through a narrow sheet-iron trough fixed at a slight slope so that the lower end shall be about 2 feet above the ground.

There should be four men appointed to each *piao* selected on the same principles as to caste as those employed at the wells.

These men must never pour directly into any man's pot, but always into the trough and thence into the vessel, placed below the trough, and filled from it. It is important to have the trough well above the ground, so that it may not be touched by the vessels or splashed from them. The trough should be of iron, because if it does happen to get infected, it will, what with rust and heating in the sun when dry, almost certainly disinfect itself very soon after. It is important to discourage the practice of drinking direct from the trough, as it may lead to infection and always occasions a great waste of water. Every mate should be told to see that his gang keep themselves well supplied with *gharas* for the storage of water and smaller pots for drinking; in the absence of such conveniences they are apt to drink directly from the trough in the day, and to wash, and even drink, at dirty ponds or tanks at night or in early morning. If earthen vessels are used at a *piao*, they should be disinfected once a week and generally destroyed after being in use for one month, and should not ordinarily be carried on to a fresh place, but be broken up and new ones used at each new *piao*. With a little encouragement and protection local potters bring quantities of *gharas* and earthen pots to the works, and can make large jars to order. If there is a difficulty in obtaining new jars, the old ones may be used again, but must be disinfected with a small charge of permanganate of potassium before being set up again. The deep red water used to disinfect them should stand in them for six hours and then be poured off.

As a rule eight *piaos* will be found sufficient for a full charge even in the hot weather.

Regulation of
water-supply.

37. (a) Wells should always be used for obtaining the supply of drinking water in preference to tanks or rivers.

(b) Wells, or other suitable sources of water-supply not used for the supply of drinking water, should be selected for bathing and washing clothes.

(c) If there are more wells than need be used, the unused one should be guarded to keep off the workers and so also with doubtful or tainted wells. All wells in use should be disinfected with permanganate of potassium once a week. The permanganate of potassium should be purchased wholesale, ready made up in two-ounce packets, packed 40 in a box, which will then contain five pounds. The disinfection is done by dissolving a half packet in a kerosine tinful of water, the upper water is then poured into the well and down its sides and some undissolved crystals will be left at the bottom of the tin; these must be treated the same way several times till the whole is dissolved. The water in the well should be agitated. The water will then be of a faint pink colour; if it retains that colour after four hours, it has been disinfected. But if it turns to a light brown, the well requires a fresh dose, which should be repeated until the water retains a faint pink colour for at least four hours. The disinfection should be done in the evening and repeated every week, preferably on Sundays. All this organization about the water-supply may seem to involve a great deal of trouble over a small matter, but a neglect of it will have dire consequences, where large bodies of people are collected together, and especially when they are famine-stricken people. These precautions are of vital importance to the public health.

(d) As an alternative disinfectant for permanganate of potash, quicklime may be used.

To ascertain the quantity of quicklime required, multiply the depth of water in the well in feet by the square of the diameter of the well in feet and divide by 20. The result gives the number of seers of quicklime to be used.

(e) If the supply is from a river or running stream, no washing of clothes or bathing should be allowed in it above the line of huts, and the ghâts where the water is drawn should be always kept in a clean state. If the supply is from tanks, they should be strictly preserved solely for drinking purposes. Animals must not be allowed to drink from the same tank as human beings.

(f) Every effort must be made to economize the supply of water. If it runs very short, the people must be put on an allowance. An adult requires at least four pints of drinking water and two pints of cooking water daily; two children may count as one adult in this calculation. Oxen usually drink about five gallons of water daily.

Market.

38. When wages are paid in coin and the workers have to purchase their own food, every large work should have a small market consisting of two rows of huts made of shelter screens, with a 20-foot roadway between them and a fence of light bamboo trellis round them with openings at the ends of the street. Respectable *baniyas* and traders should be admitted free. The market should be patrolled by a *chaukidar*. A list of the prices of the day should be hung up in the market. The quality of the food should be frequently examined and immediate action taken against any one found selling unsound food. The unwholesome small pea called *khasari* or *kesari* should not be admitted into the market. The food trade on a full-sized famine relief charge is greater than that in any ordinary small town, and if facilities are given to respectable local traders they will be careful not to lose them by selling unsound food, or worrying the people with needlessly frequent changes in their prices. The following advantages

can be offered, among others, in exchange for fair trading:—A small grass hut in the market for a shop; free carriage of grain from the nearest mart, if the trader is willing to sell at the current rates of that mart; prompt and free exchange of all his copper into silver paid into the local treasury to his credit. These advantages will ordinarily attract the traders. In exceptional cases requiring exceptional treatment the District Officer will make special arrangements by contract or otherwise.

39. When wages are paid in grain, the Durbar can either arrange with contractors for a regular supply of the various grains required or make their own arrangements for carrying these to the works and storing them there. Experience has shown that to give out contracts for the supply of grain is most unsatisfactory. It is very expensive, the contractors find it difficult to keep up a sufficient supply, and it is almost impossible to prevent the periodical issue of unwholesome grain. Very little organization is required to ensure a steady supply of grain from the State stores. State transport should be used to bring the grain from the stores to the works. On the works a temporary store-house should be erected and placed under a guard and from this issues should be made as often during the day as the system of payment in vogue demands. Supply of grain to works.

40. The workers will ordinarily require very little shelter except in the very coldest months in some States or when the hot winds become dangerous. When it is necessary to erect huts, the site should be carefully chosen with a view to the proximity of the work and the water-supply, the facilities for procuring fuel and food, and for surface drainage. As far as possible, the workers should make their own shelters from any convenient materials that may be procurable in the nearest jungles. The cheapest and most comfortable shelters are obtained by digging the space to be covered down to a depth of $3\frac{1}{2}$ feet. The earth excavated is then built up as a wall on which a pent roof of thatching is put. The roofs may be made of basket-work screens smeared with mud, or of any of the coarse grass or shrubs found in most jungles. A door is put at one end and a hole for ventilation at the other. A shelter of this description with a superficial area of 12 square feet and with walls 7 feet high at the lowest point can comfortably accommodate 12 persons. Two men can dig out the floor, build the wall and have the roof ready for thatching in three days. A hut with a dug-out floor is much warmer in winter and as markedly cooler in summer than one on the ground level with the full height of its wall exposed to the air and hot winds. Huts of a similar pattern should be erected for the staff and roofed in with tents or felt. The latter huts should be of a larger size and should be placed with a view to convenient supervision. Hutting.

41. The medical staff at the disposal of a Durbar during a severe famine is usually inadequate. The permanent medical establishment is, at the best, just sufficient for the average requirements of the State in an ordinary year, and when famine is widespread, qualified extra hands are almost unobtainable. The following is the scale of medical relief for a full charge, that is, a camp of from 5,000 to 8,000 persons. It will not be always possible to attain this standard, but it is given as a guide:— Medical arrangements.

STAFF—

- 1 Hospital Assistant.
- 1 Compounder or Dresser.
- 1 Cook.
- 1 Sweeper.

A water-carrier and other menials can always be obtained from the camp and need not be specially entertained, but must work exclusively for the hospital.

A hospital hut made of grass or mats measuring 40' x 16' with walls 8' high will accommodate 16 to 18 patients. A division can be made in it to separate the male from the female patients.

A hut for the Hospital Assistant divided into two rooms should be provided. One of these will serve as a dispensary.

Huts must also be provided for the hospital kitchen, hospital cook and sweeper.

A small mat enclosure should be put up at a little distance from the hospital, to act as a latrine for the patients.

The above will meet all the ordinary requirements of a famine camp. No special accommodation is necessary for out-patients. These will ordinarily be seen outside the dispensary hut or in the general camp, when the Hospital Assistant is on his inspection rounds.

When a famine camp is situated in the neighbourhood of an existing branch dispensary (say within two or three miles), no special arrangements will ordinarily be required at the camp itself, as the Hospital Assistant and staff of the dispensary can itinerate through the camp daily, attending on the spot to trifling cases; those more seriously ill being conveyed to the dispensary, where the accommodation, if insufficient, can be increased to any extent by the addition of grass huts.

The following scale of medicines, hospital necessities, etc., will ordinarily suffice for a camp hospital:—

Carbolic acid, pure	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4 oz.
Sulphuric acid	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1 lb.
Carbonate of ammonia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2 lbs.
Distilled water	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2 bottles.
Nitrate of silver	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4 drachms.

Bismuth Subnit.	8 oz.
Castor oil	6 bottles.
Chlorodyne	4 oz.
Liquor Ammon. Fort	8 oz.
Ol. Anisi	2 oz.
Ol. Menth. pip	2 oz.
Pil. Scilæ Co.	4 oz.
Pulv. Ipecac. Co.	1 lb.
Pulv. Kino Co.	1 lb.
Quinine Sulph.	3 lbs.
Sodæ Bicarb.	2 lbs.
Spt. Ether Sulph.	1 lb.
Spt. Ammon. Aromat.	1 lb.
Tinct. Catechu	1 lb.
Tinct. Iodi	1 lb.
Tinct. Opii	1 lb.
Tinct. Zingiber	1 lb.
Vin. Ipecac	1 lb.
Vaseline	2 lbs.
Zinci Sulph.	4 drachms.
Rum	6 bottles.
Clinical Thermometers	2
German silver catheters, Nos. 2, 4, 6, 8	one each.
A Field Tourniquet.	
A reel of silk.	
A reel of plated wire.	
Lint	1 lb.
Country tow	5 lbs.
A pocket dressing case.	
Dispensary scales and weights.	
Pestle and Mortar (composition).	
Slab for making pills.	
Spatula.	
Measure glass (4 oz.).	
Ditto (minim).	
Ditto Pewter (1 oz.).	
Bottles (medicine) with corks (8 oz.)	2 dozen,
Ditto ditto (4 oz.)	2 dozen.
Gallipots, country	1 dozen.

It is not necessary to lay down any special scale of stationery or office requisites. The Principal Medical Officer can supply such pens, pencils, ink and paper as may be required with two small blank registers, one for the admission of sick and the other for diet, and an inspection note-book for the use of the Hospital Assistant.

The necessary furniture for the dispensary will be a camp table, a chair, with a strong wooden box 3' x 2' x 2' provided with a padlock.

Ordinary bazar string charpoys will be used in the hospital.

Blankets must be purchased for the sick—three for each patient.

Assistant Surgeons or Hospital Assistants deputed to large works should be subordinate to the District Officer, but in professional matters they should be under the control of the Principal Medical Officer of the State.

Field hospitals.

42. The plan of the field hospital should be as simple as possible, and so arranged that the whole can be burned down when the structure is abandoned. To enable the patients to escape in the event of fire, one side of the enclosure should be a mud, or codd, wall with a gateway in the middle, completely clear of hutting. All the grass huttings should be whitewashed with a thin mixture of lime and clay, or with clay and cowdung.

There should always if possible be a spare hospital ahead of the one in use, so as to be ready for an epidemic. An abandoned hospital should be immediately burned to the ground if it has held a patient suffering from any epidemic disease, the site of the burnt hospital should be sprinkled with about 6 cubic feet of quicklime sifted evenly over it, the whole being well sprinkled over with water until the lime is thoroughly wet.

The Officer in Charge is required to inspect the hospital arrangements at frequent intervals, and where necessary he will report on them. Sufficient attendants, carriers and others should be supplied to the officer in medical charge, according to the scale laid down by the Principal Medical Officer in each case. Only so many relatives or personal attendants of the patients should be admitted as the scale laid down by the Principal Medical Officer admits. The hospital water-supply should be worked by its own staff, and must be entirely distinct from the general supply for the works.

Conservancy.

43. The conservancy of every hospital should be carried out by its own staff of sweepers under the directions of the officer in medical charge. For the staff there should be the usual latrine of screens and ditch. On works near a large town there should be similar latrines for the workers. On works not near a large town a line of yellow flags, about 100 yards apart, should be set out on each side of every road work and round every tank or quarry work, and every camp and hospital and at a distance of not less than 15' yards from the work or camp. The ground within these flags must be kept clean of all nuisances, and a few sweeper patrols should be posted to insist on the workers going at least outside the flags in their morning walks. The people should generally go to the east of the work; but if there is a village near on that side, they should be made to go in the other direction. The police cannot be spared for this work or advantageously employed on it.

The disposal of the dead is an important matter. The workers will not attend to it properly. At every 3 or 4 miles of a relief work there should be a burying place for Hindus and another for Muhammadans. The two places should, if possible, be on some locally accustomed spot; they should be far apart, and neither should be near a village, nor within half a mile of the work. Each should have a small staff.

In epidemics it is difficult to find wood enough to burn bodies. But every effort should be made to provide it. If friends are willing to dispose of corpses according to their various customs, they may be assisted with free firewood or ready dug graves; but in other cases the body must be buried. At the police guard, or other convenient place, there should be arrangements for the burial, free of charge, of every Hindu body which friends did not bind themselves to burn or otherwise dispose of. For the Muhammadan cemetery there should be one or two grave-diggers, who should keep a certain number of graves ready dug. The graves should be not less than 5 feet deep, and the dead should be completely and decently covered in. Unclaimed bodies should be taken charge of by the police and buried.

If this organization is ready from the first, it can, on the occurrence of an epidemic, be extended to any required extent. If a skeleton organization is not ready beforehand, it cannot be improvised in the rush of an epidemic.

44. A relief work should be started as follows. The work having been ready marked, the Officer in Charge and the principal men of his staff should be on the spot, after having gone through all points of organization. There should be a guard of one constable and four chaukidars for the money chest and to give assistance in other ways. The tools should be kept in an enclosure near the work, a sort of *zariba* with a thorny wall or fence round it, the store-keeper being huddled in it with his note book of issues and receipts ready by him. Somewhere close to the tools depôt, at about 200 yards from the head-quarters camp and the same distance from the work, there should be a large red flag on a tall bamboo; this is called the recruiting flag and marks the recruiting-ground to which new-comers are told to gather together as they arrive; and here the gangs are made up. The early morning is full of work, and therefore gangs are best made up in the forenoon, commencing at about 8 o'clock, the workers being started on the work in the afternoon. While the gangs are being made up, the future gang clerks should be present.

The starting of a work.

The recruiting-ground should have in it a clear space 150 feet long by 100 feet wide, lock-spitted into lines of squares 10 feet by 10 feet, divided by paths 5 feet wide, running lengthways from end to end of the space, which should thus contain seven lines of squares separated by six paths; each line contains 15 squares and the whole space 105 squares. The whole arrangements should be under the charge of a registering clerk who must be an intelligent and patient man. It is the duty of the registering clerk to sort all new-comers into village groups and family groups; a family group, or two or more such groups of fellow villagers, should be seated in a square, and all the persons from one village in contiguous squares. Applicants who arrive in an emaciated condition should be given at once the dependent's dole or a meal of cooked food.

He should first select from the groups the able-bodied men fit to dig, and then the people who come respectively under classes II and III, section 37 of the Code. When this is done, he should make up the gangs as nearly as possible in the standard proportion of the different classes fixed by the engineering authorities for the work, with the proviso that people of the same family and village should, if possible, be kept together. Each gang should then be seated in contiguous squares in lines,—class I in the front rank, class II in the second, class III in the third, and dependents in the fourth, children in arms being allowed to remain with their mothers. The gang should be required to select from among its numbers an intelligent man to be its mate, to whom should be given a flag and a badge both bearing the number of his gang, and also a certificate of his appointment as mate, which shall be countersigned by the Officer in Charge. But he should not be a local Brahman, nor a man who has brought a number of persons with the object of becoming their "mate."

45. All the persons being thus seated and the gangs provided with mates the registering clerk should then proceed to register them in the admission register (Form No. 1). Then the first gang register (Form No. 2) will be made out with the mate's list on the reverse. Both of these forms are very simple and can be easily kept up by a man of the most ordinary intelligence. It is necessary here to point out how absolutely indispensable these and the other registers and forms are. They will enable the Durbars to review the works of the officials, to understand where more works or more funds are likely to be required, and to see at a glance whether the proper wages are being disbursed at the different centres. The importance of the gang register cannot be over-estimated. It is the basis of all the expenditure accounts and is the surest safeguard against fraud. Officials who wish to defraud the Durbar or the people will try to spoil registers and will profess all kinds of difficulties in keeping them up. In nine cases out of ten any clerk or other official who professes his inability to keep correctly and up to date the registers and forms for which he is responsible may be safely regarded as a rogue. In any case a man who is incompetent to keep a register should be discharged. If the Officer in Charge cannot see that registers are properly kept and accounts properly checked and promptly submitted, he also is incompetent and should be discharged.

Registers and forms.

The gang registers will enable the Officer in Charge to fill up his Progress Return (Form E of the Code).

46. Form No. 2 has been framed so as to be used either for cash or grain payments. The mate's list on the reverse shows the name of each working member of the gang and the class to which he or she belongs and the totals of each separate class. The proper wage of each class is

The Instructions for keeping Form No. 2.

also known. The clerk takes the totals of each class in the mate's list and enters them in their appropriate column in the gang register. To take an illustration. If there are 20 diggers on, say, the 1st of the month, the clerk enters "20" in column 4 of the register and if grain payments are the rule he multiplies the number of chittaks earned by each digger by 20 and enters the result in column 5. The total payments for each day appear in column 16.

An Inspecting Officer will be able with these forms to muster any gang, count the numbers, and compare them with the mate's list and with the clerk's entries in Part A.

Commencement
of work by the
gang.

47. As soon as the register has been prepared for each gang the Officer in Charge should check it and also test the classification. The gang will then be sent with its register by the clerk to the store-keeper who will deliver to the mate the necessary tools, baskets, etc. Each gang should then be marched to its work, which, when shelter is required, ought to be at first the construction of their own huts. The gang clerk should then explain to the gang what work is to be done, the method and rates of payment, and the rules as to conservancy and the supply of food and water.

Every adult in the gang should be made to know his gang number and the name of the mate and the clerk. The members should be drilled to seat themselves in classes ready for muster whenever they get the order. This will save much delay and trouble afterwards.

Systems of
work.

48. The system to be adopted in carrying out work, undertaken simply to afford relief to famine-stricken applicants, must depend in the first instance on the resources of the State in men and money. Where there is a great lack of efficient establishment accompanied probably by a deficiency of funds, the modified contract system or the piece-work system may be adopted. Under the former the work to be done is made over to a contractor who is bound to employ up to the capacity of the work all applicants for relief. In consideration of the unsatisfactory class of labour he is obliged to accept, the contractor receives better terms than he would do in ordinary times. The piece-work system is payment solely by results. It is the same as the other, only the contractor does not appear and the State authorities deal directly with the people.

These two systems are capable of giving substantial relief during severe famine to all who are able to work and are not reduced in condition. But they take no account of the weak and helpless and therefore should never be employed unless arrangements are made for weakling gangs. No provision need be made for the helpless dependants of the able-bodied workers who as a rule look after their own belongings. But the weaklings have to be protected. They should be formed into gangs by themselves and put to task work under special supervision.

Task work.

49. But neither of these systems should be adopted if the task work system is at all possible. This is really modified piece-work with daily payments and subject to a maximum daily wage beyond which the workers are not allowed to earn wages. It is the only really effective system of relief in the case of severe famine. Under this system the individual should be separately tasked if possible. If this should be impossible, the digger with his carriers should be separately tasked, and if this also should be impossible, the task should be allotted to sub-gangs of from 12 to 24 workers.

Standard task.

50. (a) The standard task for workers in class I (diggers) shall be three-fourths of the task commonly performed at the time of the year by labourers in ordinary times, and, if workers in Classes II and III are employed on digging or some equivalent labour, their task shall be respectively two-thirds and one-third of the task of class I.

(b) The standard task of carriers in classes II and III shall be 10,000 cubic feet and 5,000 cubic feet, respectively, carried over 1 foot, of reduced lead.

NOTE.—The reduced lead is obtained by adding to the number of feet in the horizontal lead 72 for the initial effort and 12 times the number of feet in the vertical lift in excess of 8 feet (for which allowance is made in the initial effort). The number of cubic feet to be carried will then be 10,000 or 5,000 divided by the reduced lead.

The District Officer should have the power to vary the task from time to time. Provided the weakling gangs are separated or the weakling persons are individually tasked, this power of varying the task will be the most effective means of relaxing or tightening the conditions of relief.

The task should be reduced on the appearance of any signs of deterioration among the workers generally, particularly in the hot weather. It may safely be raised if the workers are in good condition and relief work appears to be unduly attractive. The task should be raised in this way when the approach of the rains makes it desirable to divert labour to the fields.

The Officer in Charge should decide what is the class of soil or other local condition of the task and adjust the task accordingly.

New-comers shall, for the first fortnight, or until they are fit to enter the ranks of the workers, be individually tasked: the task shall be pitched low at the outset, being raised *gradually* as the new-comers improve in dexterity and physical condition.

Weakling gangs and weakling persons in able-bodied gangs shall invariably be given a reduced task.

The able-bodied workers shall be paid according to results, *i.e.*, if no work is done, they will get no pay. But full wages shall be given for work which does not fall short of the full task by more than 12½ per cent., provided that the short work is not due to contumacy.

The wages of weakling gangs or of weakling persons individually tasked shall in no case be permitted to fall below the scale of allowances fixed for dependants.

One day in the week should be strictly set apart as a day of rest.

51. Miscellaneous gangs such as water carriers have their own special duties, and the best way of getting full work out of them is to arrange that there are no more of them than are

Miscellaneous
tasks.

absolutely necessary and that they perform their duties efficiently. It is different with the great mass of workers. If the arrangements are complete, there should be any quantity of work for them to do, and the problem is to efficiently control their labour so as to obtain the best outturn compatible with effectual relief to all applicants who are able and willing to work.

52. Relief workers will be generally employed on three principal kinds of labour, (a) ^{Kinds of relief labour,} earthwork, (b) collecting kankar, (c) breaking stone metalling. The following instructions are given for each kind. This task should be laid out for the whole gang, and the tasks for the small groups or individuals should be pegged out within the task for the gang.

53. A.—EARTHWORK.

Table of the digger's task, excavation only. For diggers, men of class I.

Earthwork.

Soil.	Daily task in cubic feet.		Remarks.
	Ordinary.	Low.	
Soft earth, such as sand	200	150	In the rare cases when a woman works as digger she should have a two-thirds task.
Light earth, such as sandy loam	150	100	
Medium earth, as loam or marl	110	80	
Hard earth and clay	85	70	
Stony soil and black cotton soil when dry	85	60	

(a) When a gang is first started on work, a rate based on the low task for that kind of work may be allowed to the diggers, but it should be gradually raised in a fortnight or so till it corresponds to a suitable task according to the soil and the strength of workers, which will, as a rule, be the "ordinary" task. The "low" task may be adopted under unfavourable conditions, climatic or otherwise: it is by no means intended that only the low task shall be adopted, or that it shall be the prevailing standard. If less than the low task is ever allowed, the fact should be reported to the Durbar.

(b) The task adopted represents one day's wage of a male digger, class I, and it thus fixes the pure digging rate for the working on the basis of the grain price adopted. The pure digging rate then varies with the kind of soil and the grain price. The remainder of the rate is made up of the cost of carrying, and in road work there are usually more carriers (*i.e.*, persons only fit for carrying) than are required for the work. In such cases the more able among the weakly men and lads should be utilized for digging as far as possible; and if there is still a surplus of carriers, the feeble and emaciated among them should be put on to breaking clods and dressing the work.

In tank work involving a long lead it is important to carefully adjust the carriers to the quantity of earth which has to be carried, and this should be done as follows:—

(c) The reduced lead of the work in hand should be taken as—

$$R = 72 + H + 12(V - 3) \\ = 36 + H + 12V$$

where R = reduced lead in feet;

H = horizontal of lead in feet;

and V = vertical lift in feet.

Thus, if earth has to be lifted 10 feet and carried a distance of 100 feet from the digging pit, the reduced lead = 256 feet.

A carrier unit will be taken as 10,000 cubic feet carried over a reduced lead of one foot. Then the simple rule is to divide 10,000 by the "reduced lead," and the result gives the number of cubic feet which should be carried by each carrier unit. Thus in the above case each carrier unit should carry away 39.06 cubic feet of earth, and if the soil was of a kind that required a digger's task of 110 cubic feet, then each digger should have $\frac{110}{39.06} = 2.8$ carrier units, or a gang of 20 diggers should have 56 carrier units.

(d) An ordinary woman or weakly man is counted as a carrier unit, but children between 10 and 14 are counted as half a unit. Thus in the above case a gang containing the average proportions found on many works in late famines would consist of 20 men capable of digging, 5 weakly men, 34 women, and 21 children between 10 and 14 years, and it would have $5 + 34 + 21 \times \frac{1}{2} = 49\frac{1}{2}$ carrier units, and hence the carriers could not do their work. It would be necessary to turn two of the least efficient diggers into a carrier: there would thus be less earth dug, amounting to the work of probably more than four carrier units, and there would be two more carriers to remove the earth, which would correct the proportions. If the same gang were employed on a road with a lift of five feet and mean horizontal lead of 50 feet, the 20 diggers would only require 32 carriers, and in that case eight or nine of the women and weakly men should be placed among the diggers, the gang as a whole being debited with only a two-thirds task for each of these less efficient diggers.

- (e) In checking the correctness of the proportion of carriers to the diggers of a gang, the simpler way is to *multiply the gang's total digger task by the "reduced lead," and divide the product by 10,000*; this will give the correct number of *carrier units* for the diggers under these conditions. This is a point which requires the constant attention of supervising and inspecting officers.
- (f) All laying out must be done well in advance of the workers and in a manner to fulfil three objects; (i) to give every one sufficient room to work in; (ii) to give at least four days' work in the same place, so as to avoid constant moves; (iii) to admit of measurements being made "up to date" until completion of the task. The markings out will require an intelligent mate and gang. Nearly all earthwork will be either on roads or in tanks; the following examples show the best methods of working in these cases:—
- (g) *Working on a road.*—Suppose a road in medium earth, as loam or marl, to be embanked two feet high with a top width of 24 feet; then the embankment will contain 52 cubic feet per foot run. Lookspit the lines at foot of embankment and the edges of borrow-pits in the usual way, taking care to provide a width of borrow-pit which will give the required earth with less than three feet depth of digging. Construct an earthen profile at every 100 feet, making the profiles one tenth higher than the embankment height, to allow for settlement. (In this case the profiles will be 2.2 feet high.) A road work in this soil will ordinarily have a digger's task of 100 cubic feet; and taking it as having a lead of 50 feet and lift of five feet, it will have a reduced lead of $36 + 50 + 60 = 146$ feet, so that each carrier unit must deal with $\frac{10,000}{146} = 68.5$ cubic feet, and each digger requires just over 1.5 carriers. Now supposing the gang has the usual proportions of 25 men, 34 women, and 21 children workers, the women and children alone form $34 + 10\frac{1}{2} = 44\frac{1}{2}$ carrier units, or enough for 30 full diggers ($\frac{44\frac{1}{2} \times 68.5}{100} = 30.48$ diggers); so that the whole of the 25 men should be employed as diggers and also four of the women, the women and any inefficient men being debited with only two-thirds tasks.

- (h) The gang task, then, might be thus built up—

	Cubic feet.
20 able-bodied men at 100 cubic feet	2,000
Five inefficient men and four women, employed as diggers, at 66 cubic feet	594
Total gang task	<u>2,594</u>

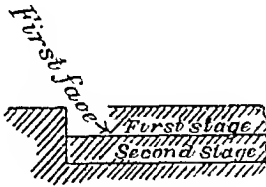
This task requires $\frac{25,940}{685} = 38$ carrier units. After deducting the four women turned into diggers, there are still $40\frac{1}{2}$ carrier units left. In such a case one or two of the more weakly women and children must be put on to breaking the clods and dressing up the work. The gang will then be able to complete $\frac{2,594}{52} =$ nearly 50 lineal feet of road per day; and to give it a week's work in the same place a length of 300 feet should be returned for it. A relief charge of 60 gangs engaged on the road work will thus spread over a length of nearly $3\frac{1}{2}$ miles; and on a narrower road it may spread over nearly five miles.

- (i) The diggers, being ranged along the borrow-pits on both sides of the road and at one end of their work, must then commence embanking at one end up to full height and width, and carry on strictly from one end, closing on to each profile as their work reaches it. They must not be allowed to commence throwing the earth on different parts of the road, but must commence at one end and go straight on. The work-agents will measure up the length of work completed up to date on each reach, and deduct the previous day's measurement to find the work done on the last day.
- (j) In embanking roads with dry earth it is very necessary to have the earth broken up very small, and to ensure this being done the diggers should be made to break up the large clods in borrow-pits while all the very weakly surplus carriers should be employed in breaking the lumps to a still smaller size. It is the mate's duty to see to this, and if it is neglected, he should be fined once or twice, and afterwards dismissed. In almost every case when a gang does not do its work fully or properly it is the mate's fault, and he should be changed.
- (k) *Working in a tank.*—In tank work the reduced lead is generally so great that it is necessary to retain only the strongest men as diggers, and to use the whole remainder of the gang as carriers in order to keep the diggers fully employed. The size and depth of the excavation also permit of the diggers working at a vertical face two to three feet high, thus doing more work. On the other hand, any close packing of gangs leads to confusion and opens a way to possible fraud. In all works it is necessary to preserve the clerks' party as a unit. The marking out of a tank must therefore have three objects in view; these are—(i) to apportion the diggers to the carriers correctly and then give every digger a good "face" to work on; (ii) to keep the gang separated; (iii) to fit in full parties as near as may be. The first object is attained by approximately calculating the number of diggers in each gang on the work and dividing the depth of excavation into stages of two to three feet depth, putting a line of

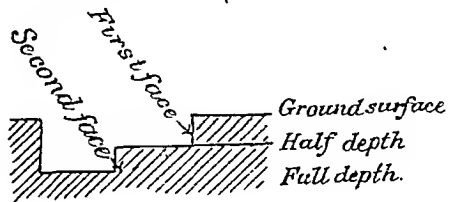
diggers on each stage. The second is attained by keeping a dividing strip between every gang and its neighbours. The third object is kept in view in selecting the number of digging strips. The depth of excavation will seldom be less than four feet or more than six feet, and will in either case furnish two stages for digging. The area of excavation will vary very greatly, but it will seldom be under 200 or over 600 feet square. The following examples are therefore based on the employment of two lines of diggers in every case, and are fitted to tanks of from 200 to 600 feet square. In all the examples it is supposed that the spoil is thrown out on three sides only, and on to existing spoil tanks about 8 feet high and 30 feet back from the excavation pit.

- (l) In every case the gang must commence at one end of their strip with a single line of diggers going down to the full depth of their stage, until there is room for the second line to enter. The first operation is shown in the sectional sketch A.

SKETCH A.



SKETCH B.

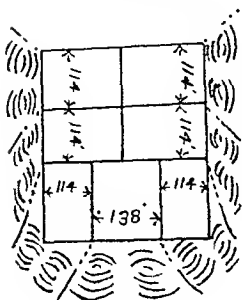


As soon as there is room for the second line of diggers they open their stage to a second face; and a section of the work then assumes the form given in sketch B. After this the second line of diggers keeps about 10 feet behind the first line. In all cases the measurements of each strip are made up to date, and the last day's, or the last week's, work is found by subtracting the quantity on which the last previous payment was made. In every case the carriers of each gang must be fitted to the diggers in accordance with the measured lead of their strip of work reduced to horizontal feet in the manner before explained: thus the gang in certain parts of a large tank must have fewer diggers and more carriers than those of some other parts. In all cases the place for depositing the spoil must be clearly marked out for each party and the clerks and mates made to understand the marks.

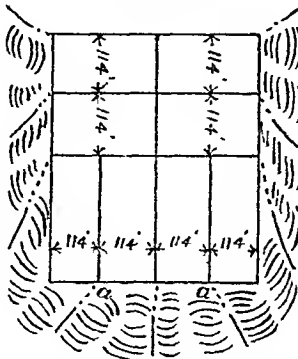
- (m) A tank deepened five feet over an area 200 feet square will give a mean reduced lead of about 300 feet; so that on the average each carrier unit must carry $10,000 \div 300 = 33$ cubic feet: and if the digger's ordinary task is 120 cubic feet, each digger must have $120 \div 33 = 3.7$ carrier units. An average gang contains 25 men, 34 women, 21 working children; and if we convert the whole gang into carrier units, it contains $25 + 32 + 10\frac{1}{2} = 69\frac{1}{2}$ carrier units. For working purposes the whole gang may be considered as composed of groups, each group containing one digger and 3.7 carrier units; but the digger is equal to a carrier unit, therefore for the average lead of this work the whole gang is to be composed of $69.5 \div 4.7 = 14.7$ or 15 working groups, in each of which there is one digger, so there are altogether 15 diggers in that gang on that piece of work. There are two lines of diggers, or 8 in one line and 7 in the other, and each digger requires three feet of face to work in. The gang thus requires a strip 24 feet wide; and the tank should be marked out into six digging strips, each 30 feet wide, separated by five dividing strips each four feet wide. The dividing strips, and the sloping of sides, are to be dug out last of all, and by the gangs which have finished their straight strips. A tank of this size will accommodate one clerk's party and find it in work for, approximately, 23 working days.
- (n) A tank 300 feet square dug to a depth of five feet will probably have an average reduced lead of about 380 feet; the carrier unit must therefore remove, on the average, $10,000 \div 380 = 26.3$ cubic feet of earth, and with an ordinary task of 120 cubic feet each digger will require 4.6 carrier units. The average gang of $69\frac{1}{2}$ carrier units may be considered, for the purposes of this work, as composed of $69\frac{1}{2} \div (1 + 4.6) = 13$ diggers and the rest carriers. There will be seven diggers in a line requiring 21 feet of digging face: and the tank should be marked out into 12 digging strips each 21 feet wide, separated by 11 dividing strips: the middle one of the dividing strips should be eight feet wide and the others four feet. The wide strip in the middle marks the division between the parties of two clerks. This work will accommodate two full parties and find them in work for, approximately, 30 working days. The dividing strips, etc., being left intact to the last and then cleared off by gangs which have finished their straight strips, as before.

- (c) Working out in the same manner the length of digging face required for the average gang, we find that a tank dug 5 feet deep and 400 feet square will probably require an average of 5.1 carrier units to a digger, and 12 diggers in a gang; and thus the digging strips must be 18 feet wide. A tank dug 500 feet square will probably require an average of 5.4 carrier units to a digger, and 11 diggers in the gang; so the digging strips must be 18 feet wide. A tank dug 600 feet square will probably require an average of six carrier units to a digger, and 10 diggers to the gang; so it must have digging strips 15 feet wide. These three sizes will then be marked out as sketched below:—

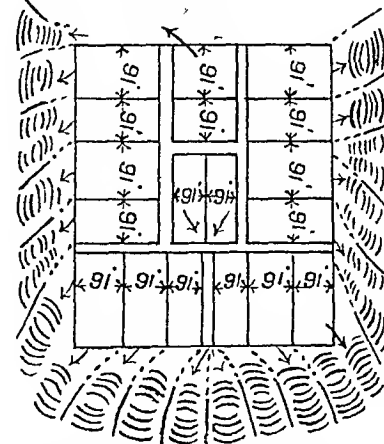
TANK 400 FEET SQUARE.
Open end.



TANK 500 FEET SQUARE.
Open end.



TANK 600 FEET SQUARE.
Open end.



The tank is divided into blocks for seven parties, as shown on sketch by roads 17 feet wide. Each block is longitudinally marked out into digging strips 18 feet wide, separated by dividing strips six feet wide. The middle block at the rear will contain six gangs, and each of the others will hold five gangs. If dug five feet deep, the tank will employ seven parties for approximately 16 working days, on the basis of a task of 120 cubic feet. The work could be marked to contain another two gangs; but it is better as it is. In this and the other sketches the position for the spoil of each party is shown by radiating lines. A bamboo planted on the old spoil at each end of each such boundary will sufficiently mark the line.

The tank is divided into blocks for eight parties, by roads 16 feet wide, the two roads ending at a being only 14 feet. Each is then longitudinally divided up for five gangs in the same manner as the previous example. If dug five feet deep, the tank will employ eight parties for, approximately, 24 working days with a digger task of 120 cubic feet. If it is desired to complete the tank in a shorter time, it is easy to get in 12 parties by making the dividing strips narrower and adopting an arrangement somewhat like that in the next example. The tank could then be excavated in 16 working days; but, unless time is a serious consideration, the work should be marked out as sketched.

This is a somewhat different mode of marking out, the object being to get this large work completed in a short time. The whole is divided into 18 blocks by means of the main road 18 feet wide, shown by double lines, and the smaller road 9 feet wide, shown by single lines. Each block is sub-divided into five digging strips 15 feet wide separated by four dividing strips 4 feet wide; and each will accommodate a clerk's party. The direction in which spoil must be carried is shown by an arrow in each block. The middle blocks will require an extra force of carriers. The work will accommodate two complete relief overburges containing 18 working parties, and if dug five feet deep, it will find them in work for, approximately, 17 working days with a digger task of 120 cubic feet.

At the rear of every relief charge on a road there should be a finishing gang, one that has shown it has learned its work well and is under an intelligent mate. In the same way an excavated tank should be handed over to the finishing gang for a few days. It will be the duty of this gang to properly finish up all irregularities left by the less skilful gangs in front. No particular task can be set for them, and the work very largely depends on the mate in charge, who should be a selected professional *bindal* on fixed wage.

54. (a) Kankar quarries are often of irregular quality and depths, and the quarry pits are scattered over them in a way which prevents working by the gang as a whole. For this and other reasons it is better to carry out this kind of work by means of groups of workers, formed within the gang; either family groups, or groups of voluntary associates in labour. The gang still remains, but the primary dealings are with the groups of workers. Each group, or squad, should have its own headman to keep tally and receive the payments for the group. Each clerk should keep a note-book of all the squads in his party, and the detailed measurements and payments should be recorded in it by the work-agent and the clerk respectively. These measurements and payments should ordinarily be made once a week.

(b) The rate to be paid will be the ordinary local rate for the same kind of work, with an addition equal to the difference between the normal price of the grain in ordinary use and the wages table price ordered for the time being by the Local Government. Thus if the normal price is 18 *sérs* and the Government has fixed a wages table price of 14 *sérs* at the time, then the local rate for digging and cleaning and stacking kankar at quarries must be increased by $\frac{4}{13}$ ths, or, practically, by $4\frac{1}{2}$ annas per rupee of the ordinary local rate. This rate should be fixed in the same manner as a "task" is directed to be fixed. It is the task under another aspect.

(c) Under average conditions a man's task of kankar may be taken at 12 cubic feet in the day; but it varies so greatly with the depth at which kankar lies, that the best guide to a man's work under the conditions of the locality is found in the local rate for kankar in that locality.

(d) The 'kankar' should be cleaned at the quarry, and a whole week's work of each group stacked in separate stacks, 26 inches high, 8 feet wide at top, and 12 feet wide at bottom; every foot in length of the stack being taken as 20 cubic feet. If space is limited, the stacks may be made as high as 5 feet; but all stacks of one charge should be made to the same dimensions of height and width. The kankar requires frequent inspection to see that the cleaning is thoroughly done.

55. (a) Stone-breaking will be very largely done in the rainy season. At this season the workers come and go with changes in the weather and fluctuations in agricultural employment. If small co-operative groups of labour were formed, the fluctuations of labour would lead to such frequent dissolution and re-organization among the groups that accounts would be thrown into hopeless confusion, without any practical benefit in other ways. A larger unit of labour is required in which the constant small fluctuations can have room to exhaust themselves without much disturbance of the unit as a whole. For this purpose the "gang" is a convenient size; and that being treated as the unit of labour, all the members forming a gang must gain or lose by the outturn of its labour, which will vary with the industry of the "breakers" who form the greater part of it. It is also convenient to form the workers into gangs which will turn out equal quantities of stone per day, whatever may be the quality of the stone.

(b) The stone should be broken to *pass through* a two-inch ring. In the ordinary qualities of stones mostly used for ballast or metalling it is found that an ordinary man, fit to break stone, can, on the average, break up five cubic feet to this size; a weakly man, or ordinary woman, can break up about $3\frac{1}{2}$ cubic feet; and a weakly woman, or a child between 10 and 14 years, can break up on the average $2\frac{1}{2}$ cubic feet. The actual quantities broken will vary with the quality of the stone; but the proportions of 5, $3\frac{1}{2}$, and $2\frac{1}{2}$ will remain fairly constant, and they simplify the accounts.

(c) A gang will be headed by a "mate," and should have two to six strong men according to nature of the quarry to do the hard work of getting out the stone, and of sizing it into five to eight-inch blocks ready for breaking up. These men will require to use crowbars and sledge hammers; and their wages will correspond to the wages of "diggers" on earthworks, but there must not be more of them in a gang than the nature of the quarry makes absolutely necessary. There will then be some 60 "breakers" consisting of weaker men, of women, and of the stronger children: these will form the mass of the gang. The few weaker children will usually be able to do all the carrying required; but in some situations it may be necessary to reserve a few of the women or bigger children for carrying stone.

(d) The principle of the system lies in payment by results, with a special rate for the weakly, so that they may earn enough to live on. As regards the money earned, if a lighter task is accepted for a certain wage, it has the same effect as if a higher rate is paid for a certain quantity; and it is far simpler for the subordinate staff to deal with. If gangs are made up with different capacities of work, the daily estimation of their correct wages requires a different calculation to be applied to each gang, and this is in practice beyond the powers of the subordinate staff available; nor could they be entrusted with it, because the results could not be checked by superior officers without their also going through all the gang calculations in detail which is impracticable. The first step, therefore, is to *form all gangs with the same capacity of outturn* as follows:—

(e) First appoint an intelligent mate, a man accustomed to this kind of work, if obtainable, and next select the required number of able-bodied men to "get" and "size" stone under the local conditions of that particular quarry. Then make up the gang of enough "breakers" to break up 240 cubic feet of stone, with enough carriers to carry that amount of stone under the local conditions of the work in hand. It will seldom be necessary to appoint any carriers in excess of the weaker children who belong to the adults of the gang.

(f) In making up the "breakers" of a gang the quality of the stone will determine the number of people to be employed; but the *proportions* of stone broken by the units of each kind of labour will be maintained. Able-bodied men ordinarily leave the works immediately after rain commences, and it is difficult to find enough of them for work that cannot be done by anyone else. If able-bodied men are in such excess that some of them have to be put on to stone-breaking, then select the weakest of them for that work, and pay them on the scale of class C of section 125 (a). Men breakers of ordinary strength should be given a task proportionate to five cubic feet of the standard stone. The women should also be paid as class C of the wages table and be given a task proportionate to $3\frac{1}{2}$ cubic feet of the standard stone. The capable children of from 10 to 14 years should be given a task proportionate to $2\frac{1}{2}$ cubic feet. The whole calculated task of the gang should total up to about 250 cubic feet, which allows about 10 feet as a margin for temporary absentees.

(g) The *actual* quantity calculated to be broken up by each class of breaker may differ according to the quality of the stone; but the *relative proportion* broken by the units of the different classes will remain constant, and the calculated quantity to be broken up by the gang as a whole will always be approximately 240 cubic feet, whatever the stone may be. Thus a gang working on tough stone will have a larger number of breakers and will be a larger gang, but their total task will still be 240 cubic feet; while a gang working on brittle stone will contain fewer breakers and will be a smaller gang, but still must turn out the same total quantity of 240 cubic feet per day.

(h) Most ordinary hard stone used for metalling can be broken in the quantities of 5, $3\frac{1}{2}$, and $2\frac{1}{2}$, which have been taken as a standard, and a stone of this quality is here called the "standard stone," and it should be the kind worked on if there is any choice in the matter; but if it happens that a softer stone must be worked, as, for instance, one in which an

able-bodied man can break up 11 cubic feet in a day, then the gang must be made up of fewer breakers, so as to give a proportionately larger task to each person. This proportionate modification can be more easily applied to the total task of the gang than to that of each individual separately, and the result is the same. It should be applied in the following manner:—

The standard stone runs to five cubic feet per man; the particular quarry being worked runs to 11 cubic feet per man; the total task done must be 240 cubic feet.

Then $x : 240 :: 5 : 11$.

$$x = \frac{240 \times 5}{11} = 109.$$

So that a number of "breakers" capable of turning out 109 cubic feet of the standard quality of stone are capable of turning out 240 cubic feet of this quarry. Thus each gang on that soft quarry requires enough breakers to turn out 109 cubic feet of the standard stone; but they must turn out 240 cubic feet of that particular stone. In making up a gang for a quarry like this the breakers would be taken on, family by family, each unit being debited with its due quantity of the standard stones until the total quantity of standard stone they could break totalled up to 109 cubic feet and a little over. The gang would then be able to break 240 cubic feet of the softer quarry under work.

(2) It is the particular business of the Engineer to carefully ascertain the quantity of stone which an able-bodied man can be fairly expected to break up on each quarry in work; having done this, he will make up the strength of the "breakers" for each gang in accordance with the following table:—

Quality of stone. Quantity which can be broken to two-inch gänge by an able-bodied man	Breakers. Required capacity of the breakers stated in terms of the standard stone.	REMARKS.
1	2	3
Cubic feet	Cubic feet.	For each kind of stone in column 1 the breakers of each gang are to be made up to a capacity for breaking the quantity of the standard stone which is shown in column 2, <i>plus</i> a small margin for temporary absentees.
4	360	
5	240	
6	200	
7	171	
8	150	
9	133	
10	120	
11	109	

(7) Then on a quarry of the standard stone the gang might be composed somewhat as follows:—

Class of workers.	Number.	Task of standard stone.	
		Each person.	Total of class.
1	2	3	4
		Cubic feet.	Cubic feet.
<i>I Men, getters</i>	4	...	...
<i>II Men, breakers—</i>			
(a) Ordinary	15	5	75
(b) Weakly	5	3½	17½
<i>II Women, breakers—</i>			
(a) Ordinary	30	3½	105
(b) Weakly	4	2½	10
<i>III Children, breakers</i>	17	2½	42½
<i>III " weakly, reserved for carrying</i>	10	...	...
Total, workers	85	Task.	250

(k) The following example shows an average gang as formed for a quarry of stone in which an able-bodied man can break eight cubic feet. In this the task, in terms of the standard stone, must total up to about 150 cubic feet, plus a small margin :—

Class of workers.	Number.	Task in terms of standard stone.	
		Each person.	Total of class.
1	2	3	4
		Cubic feet.	Cubic feet.
I Men, getters	3	...	...
II Men, breakers—			
(a) Ordinary	3	5	15
(b) Weakly	2	3½	7
II Women, breakers—			
(a) Ordinary	18	3½	63
(b) Weakly	6	2½	15
III Children, breakers	22	2½	55
III „ carriers	10	...	...
Total, workers	64	Task of standard stone.	155

In making up gangs care should be taken that the “getters” are not in excess of actual requirements. The men breakers get paid the same, whether ordinary men or weakly, and therefore need not be kept separate in the daily accounts, but they should be distinguished in the muster roll. Similarly with the women.

(l) When the broken stone is stacked on or near the quarry, each week’s work of each gang will be stacked separately for purposes of checking afterwards. The stack should be twelve feet wide at base, eight feet at top, and two feet deep. Where stacked along a road, the stacks will have the usual dimensions ; but each week’s work of a gang must be a separate stack. Each gang should have a separate breaking and stacking ground, so far as practicable, in the space available. Temporary absentees in excess of the margin already allowed to the gang should be allowed for by a proportionate reduction in the day’s task. Thus if two breakers are absent from the above example of a gang, it is only necessary to reduce the task by five cubic feet, because the strength of the gang is already equal to five cubic feet more than the ordinary task required.

56. The great principle to be borne in mind in fixing a wage scale is that the famine wage **Wages.** should be the lowest amount sufficient to maintain healthy persons in health. Persons who are not in health when they come to the works should be specially treated.

The first question that arises is whether the famine wage should be paid in grain or in cash. But, whichever medium is adopted for the wage, payment should be strictly by results. When full tasks are not performed under either system, the amount of wage due for a full task should, subject to a margin of 12½ per cent., be reduced proportionately to the portion of the task remaining to be done. Thus a worker or a party of workers performing only half of his or their task will receive only half the prescribed wage. The following table will be found useful in carrying out this principle in practice :—

Class of workers.	WAGES TO BE PAID WHEN THE TASK IS—			REMARKS.
	Over and 12½ per cent. under the task.	Short of task Between 12½ per cent. over and under—		
		Three-fourths of the task.	One-half of the task.	
Convenient short designation of the wage.	P.	Q.	R.	
Special	The full wage of each class.	Twenty-five per cent. less than the full wage of each class, omitting to deduct fractions of a pice.	Fifty per cent. less than the full wage of each class, omitting to deduct fractions of a pice.	Except for weakly gangs no payment should be made for less than one-half the ordinary task, but the work should be counted in next day's measurements.
I.—Adult diggers				
II.—Adult carriers				
III.—Children 10 to 14 years				

57. The system of grain payments has many advantages over the other. Once the amount **Grain payment** of grain is fixed for each class of worker there is no change and each person comes to know

exactly how much food he or she ought to receive every day, provided the allotted task is finished. The chances of speculation open to the distributing agency are fewer than those given under the cash system, while the price-basis of the grain equivalent is subject to fluctuation. The workers eat all they get and have no temptation to starve themselves in order to save money. They have no chance of running into debt with the camp shopkeepers. The grain system is also the less expensive of the two, as the standard of the grain wages is appreciably lower than that of the grain equivalents. The disadvantages are the chances of fraud open to the officials who purchase the grain and transport it to the works. But when fraud of this kind exists, it is the State who is robbed and not the people.

Scale of wages.

58. No question was more fully discussed and none gave rise to greater difference of opinion in recent famines than the daily amount of grain required to keep health in adults of either sex and in children. It is important on financial and disciplinary grounds that there should be a distinction of sex among adults, and that a man's wage should be higher than a woman's in the same class of workers. But as the classification into diggers and carriers broadly answers the same purpose as differentiating the sexes, it will be found more convenient to make no distinction between the wages of male and female workers. The differentiation should, however, be preserved in the case of dependants, of the rest-day wage and of the gratuitous dole. The age for working children should be fixed at from 10 to 14 years. All persons over 14 years should be classed as adults and no child under 10 should be allowed to work. The classification of children is, of course, made on their physical appearance. All children under 10 should be classed as non-working children, but as a child of four years, for instance, can't eat as much as a child of nine years, there should be two rates of doles for this class. As to infants in arms, the mother should receive a small extra ration where grain payments are the rule and an extra piece when wages are paid in cash.

Where wages are paid in grain, all workers and dependants should receive food on the weekly rest-day. When cash payments are the rule, workers and dependants alike should receive the dependant's dole of grain if such an arrangement is possible. If grain doles cannot be arranged to prevent people coming solely in order to get the rest-day wage, it should be refused to all who have not been three days on the works; emaciated people, however, should get the wage in every case. There is no necessity for a minimum wage for the able-bodied. Experience has shown that the system of a minimum wage tends to widespread pauperization. But this wage can be dispensed with safely only if there are satisfactory arrangements for the employment of the weakly and if the tasks are carefully adapted to the nature of the work and the powers of the workers. And in order to provide for cases in which these conditions may be temporarily absent, the District Officer should have the power to direct the issue of a minimum wage if by reason of delay in the inception of relief measures, or of a sudden and unexpected influx of workers, or of insufficiency of staff it becomes for the time impossible to effectually secure these two conditions.

It is a matter of some difficulty to lay down a scale of daily grain rations which will be applicable to all the various States scattered over India when there exist such marked difference in their resources, the efficiency of their administration, the physique and habits of their people. The following table, therefore, is given only as a guide to the fixing of a grain wage scale. It should not be taken as an absolute standard.

CLASS.	WAGE IN CHITTAKS. (1 chittak = 2 ounces).	
	Male.	Female.
Special—Mates and special gangs	15	...
Class I—Diggers	14	14
„ II—Carriers	13	13
„ III—Working children	10	10
„ IV—Adult dependants and rest-day wage	12	10
„ V—Non-working children—		
Over 10, but under 14 years	6	6
Over 7, but under 10 years	5	5
Under 7 years, but not in arms	4	4
Children in arms	Two chittaks extra to the mother.	

But these amounts must invariably be paid daily.

Cash payments.

59. When wages are paid in cash, it will always be necessary to adopt a higher grain equivalent for each class of wage than the scale that would be followed under a system of grain payments. An allowance must be made for condiments and fuel and a margin of about ten per cent must be given. The following scale has now been fixed for adoption all over British

India. It is more liberal than some Durbars will be able to afford, but, as in the case of the grain wage scale, it is given as a guide :—

CLASS.	WAGES IN CHITTAKS. (1 chittak=2 ounce.)	
	Male.	Female.
1	2	3
Special—Mates and special gangs	One pie more than Class I.	
Class I—Diggers	18	18
„ II—Carriers	14	14
„ III—Working children	10	10
„ IV—Adult dependants and rest-day wage	12	10
„ V—Non-working children between 14 and 10	8	8
„ „ „ „ 10 and 7	6	6
„ „ „ „ under 7	4	4
„ „ „ „ in arms	One pie extra to the mother.	

NOTE.—If cooked food is given, the price of the ration including the allowance of salt, oil, condiments, etc., should equal the price of the wage given in the above table.

The following table is given for the purpose of showing how the wages may be adjusted to the amount of the tasks performed.

Table of Wages when money wage for full task is 10 pice, prepared so as to allow a margin of 10 per cent. in the case of short work.

Full task in cubic foot.	WAGE EARNED IN EVEN PICE.										EXPLANATION AND USE OF TABLE.
	0	1	2	3	4	5	6	7	8	9	
	0 to 8	9 to 17	18 to 26	27 to 35	36 to 44	45 to 53	54 to 62	63 to 71	72 to 80	81 to 89	
100 . . .	0 to 8	9 to 17	18 to 26	27 to 35	36 to 44	45 to 53	54 to 62	63 to 71	72 to 80	81 to 89	90 and over
200 . . .	0 " 17	18 " 35	36 " 53	54 " 71	72 " 89	90 " 107	108 " 125	126 " 143	144 " 161	162 " 179	180 " "
300 . . .	0 " 26	27 " 53	54 " 80	81 " 107	108 " 134	135 " 161	162 " 188	189 " 215	216 " 242	243 " 269	270 " "
400 . . .	0 " 35	36 " 71	72 " 107	108 " 143	144 " 179	180 " 215	216 " 251	252 " 287	288 " 323	324 " 359	360 " "
500 . . .	0 " 44	45 " 80	80 " 134	135 " 179	180 " 224	225 " 269	270 " 314	315 " 359	360 " 404	405 " 449	450 " "
600 . . .	0 " 53	54 " 107	108 " 161	162 " 215	216 " 269	270 " 323	324 " 377	378 " 431	432 " 485	486 " 539	540 " "
700 . . .	0 " 62	63 " 125	126 " 188	189 " 251	252 " 314	315 " 377	378 " 440	441 " 503	504 " 566	567 " 629	630 " "
800 . . .	0 " 71	72 " 143	144 " 215	216 " 287	288 " 359	360 " 431	432 " 503	504 " 575	576 " 647	648 " 719	720 " "
900 . . .	0 " 80	81 " 161	162 " 243	243 " 323	324 " 404	405 " 485	486 " 566	567 " 647	648 " 728	729 " 809	810 " "
1,000 . . .	0 " 89	90 " 179	180 " 269	270 " 359	360 " 449	450 " 539	540 " 629	630 " 719	720 " 809	810 " 899	900 " "

For other rates of wage multiply the wage as calculated from this table by the full wage fixed and divide the result by 10 thus:—If full wage fixed at current rate of grain is 7 pice and wage earned as calculated from this table is 5 pice, the wage to be given is $\frac{7 \times 5}{10} = 3.5$ pice, i.e., 4 pice.

From column indicating full task paces finger horizontally along the line to the column where the figures denoting the quantity of work done show either the actual quantity of work as measured or the number between which it lies the number of pice earned is indicated in the same column under the heading of 'pice earned thus:—If the task is 100 cubic feet and the work done is 65 feet, on noting as above we find that the number 65, although not actually marked, lies in the column in which the work done is shown as 63 to 71 and the number of pice earned would, as shown in that column, be 7. The table is prepared so as to allow a margin of 10 per cent in the case of short work; thus in the example above referred to, properly speaking to earn 7 pice the worker should do 70 feet, but it will be seen that if he does 10 per cent less than this, viz., 63 feet he will be given the full amount of 7 pice. The table would apply equally to the work of an individual or of a gang.

For other tasks not included in this table separate tables would have to be prepared, and it is suggested that for tasks of over 100 feet the addition made should be in multiples of 20, thus 120—140—160, and so on.

It may possibly happen (for instance in extremely hard soil mixed with kankar) that the task for a gang will fall below 100 feet, in which case the table would have to be prepared to allow for this.

N.B.—The pice wage earned as shown in the table is that earned either by the individual (in the case of individual tasking) or each individual of a gang; in the case of gang work thus:—If the task allotted to an individual is 100 feet and he does 63 feet he will be given 7 pice. In a similar manner, if the task of the gang happened to be 100 feet and the work done was 63 feet, each member of the gang to whom the 10 pice wage applied would get 7 pice. The other members would of course get more in the proportion fixed in the scale for different classes of workers.

60. But any scale fixed may be completely overthrown by adjustments of the prices on which the grain equivalents are converted. So the greatest care is imperative in determining the price basis at the outset and in altering the wage to suit a rise or fall in prices generally. This price-basis should be so fixed as to avoid competition with that adopted in neighbouring territories. It should be fixed and altered only by order of the Durbar, but the District Officer may be authorised to meet any sharp and sudden variations in market prices by altering the basis within a limit of 20 per cent. His action should at once be reported to the Durbar for sanction. Small variations in prices should not be regarded as a ground for altering the basis of conversion.

The basis of conversion shall be the price prevailing in the nearest bazar of the cheapest grain in common use—not flour, but grain cleaned for sale. The price basis shall be fixed by the Durbar, and shall not be altered on account of small variations in market prices. But to meet sudden and sharp oscillations in market prices, the Central Officer shall have power to alter the basis within a limit of 20 per cent., reporting his action to the Durbar. The daily wages or allowances paid in cash should always be fixed in terms of full pice. For the purpose of calculating what this wage should be, the ready-reckoner will be found useful.

Dependants should ordinarily receive their allowances in grain. The allowance for a child in arms shall be given to the mother in addition to her own wage, but the child and the allowance given for it must be recorded separately in the accounts.

61. The allowance for dependants should be given to workers and dependants on all public works, and to workers on non-departmental works, for any day— Off-day allowance.

- (a) occupied in registration, marching, medical inspection, or the like ;
- (b) on which work is stopped, *e.g.*, on account of weather ;
- (c) on which a worker has obtained leave of absence from the work.

62. The daily wages or allowances paid in cash should always be fixed in terms of full pice. For the purpose of calculating what this wage should be, the following ready-reckoner will be useful. Method of calculating wages.

WAGE TABLE.

Limits of price of grain in seers and chittaks per rupee between which each pice wage is to be given.

Grain wage in chittaks.	11 PICE.		10 PICE.		9 PICE.		8 PICE.		7 PICE.		6 PICE.		5 PICE.		4 PICE.		3 PICE.		2 PICE.		1 PICE.		REMARKS.
	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	
18	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	S. C.	S. O.	By using this table for calculating wages the loss to a worker owing to fluctuations in the price of grain can never be more than one chittak. For instance, if the grain wage be 16 chittaks and selling price of grain 16 seers per rupee, the exact money wage would be 4 pice. In the 4 pice column for a grain wage of 16 chittaks we see that the price of grain per rupee may vary from 15 seers to 19 seers 15 chittaks. The lower figure represents the selling rate of grain at which 15 chittaks can be purchased; and although with grain wage at 16 chittaks the purchasing power of 4 pice would be above the grain wage when grain was selling at the rate of 19 seers 15 chittaks, the pice wage could not be reduced until grain was selling at 20 seers without subjecting the worker to a loss of more than 1 chittak. The exact rate of grain at which the grain wage can be purchased will always lie between the figures shown in columns "From" and "10" under each pice.
17	6 3	6 12	7 8	7 8	7 9	8 7	8 8	9 10	9 11	11 4	11 5	13 9	13 10	16 15	...	...	...	...	...	...	...	...
16	6 6	7 1	7 2	7 15	8 0	9 1	9 2	10 10	10 11	12 12	12 13	15 15	16 0	21 4	...	...	...	...	...	...
15	6 0	6 10	6 11	7 7	7 8	8 8	8 9	9 15	10 0	11 15	12 0	14 15	15 0	19 15	...	...	...	...	...	...
14	6 4	6 15	7 0	7 15	8 0	9 4	9 5	11 2	11 3	13 15	14 0	18 10	...	...	...	...	...	...
13	6 8	7 6	7 7	8 10	8 11	10 5	10 6	12 15	13 0	17 4	...	...	...	...	...	...
12	6 0	6 13	6 14	7 15	8 0	9 9	9 10	11 15	12 0	15 15	16 0	23 15	...	...	...	...
11	7 4	7 5	8 12	8 13	10 15	11 0	14 10	14 11	21 15	...	...	...	...
10	6 11	7 15	8 0	9 15	10 0	13 4	13 5	19 15	...	...	...	...
9	
8	7 0	9 4	9 5	13 15	14 0	27 15	Method of using the table.—From figure in first column indicating grain wage in chittaks pass the finger along the line to the column in which the selling price of grain per rupee in seers and chittaks is either identical with one or other of the rates per rupee in the sub-columns "From" or "To" or lies between those rates, the number of pice shown at the head of this column is the proper pice wage to be given, thus: Suppose grain wage to be 14 chittaks and selling price of grain 11 seers 4 chittaks per rupee, proceeding as above we find that the selling price named lies between 10 seers 8 chittaks and 12 seers 5 chittaks in the 5 pice column and 5 pice is therefore the wage to be given under the conditions named.
7	6 0	7 15	8 0	11 15	12 0	23 15	...	...
6	6 11	9 15	10 0	19 15	...	...
5	8 0	15 15	...	...

63. The basis of all labour statistics and most of the accounts is the gang register (Form No. 2). The charge progress return (Form B. of the Code) is compiled from this and from the other forms showing the statistics of the other forms of relief such as the hospital relief and so on. The weekly accounts and returns should be made up for the week ending on Saturday evening and should reach the Central Office by the next Monday morning. If it can be arranged, a copy of the charge progress return should be sent to the District Officer. The gang register should be printed on strong country paper and finished up with a strip of cotton sheeting along the binding. It should be written up by classes when the gang is first formed and it lasts for a month except when there are frequent changes in the composition of the gang. In such cases it will last for only a week or a fortnight. It should be written up daily in ink, totalled in the forenoon and checked in the evening. Gang register.

The mate should not be permitted to have any persons in his gang who have not been entered on the return by the clerk under the orders of the officer in charge. The latter should check a few gangs every day. The register is of constant use in checking gangs and is the principal instrument in detecting cases of fraud. The register will remain in the possession of the mate except when it is required for the purposes of filling up the progress return.

64. A further return called register of work (Form No. 3) will be kept for each gang by the work agent whose duty it is to measure up the work done. This will guide the paying clerk as to the wages to be paid to gangs and individuals. From this register the appropriate columns in Part B of the charge progress return prescribed by the Code will be filled up. Register of work.

65. All work-agents and clerks should be carefully drilled in the routine of their work. This is absolutely necessary to prevent confusion afterwards. Work agents and clerks

The sub-overseer or work-agent should lay out the work well in advance, so that there may be no delay in setting the gangs to work, pointing out to each gang every afternoon the work for the succeeding day. The other important daily duty which he has to perform is the measuring up of the work done and the recording of it in his measurement book and in the work register. He should also assist the clerk in calculating the wages due to each gang.

The clerk will muster his gangs daily and record the attendance at such times as may be prescribed. In the evening as soon as the measurements of work done have been recorded in the register he will work out the wages due and submit the result to the Officer in charge who will check it and make it over to the cashier or to the grain disbursing official as the case may be. When payments are made in kind, the wages should be paid there and then.

66. The following procedure will be found convenient in making grain payments. The workers should be made to sit down by gangs in long rows after the day's tasks have been finished and measured up. Each paying party should have a barrow, or handcart with an open square box fixed on the frame. A worker wheels the barrow, the clerk calls out the names and records the payments, and another worker, specially selected for the work, deals out the grain with a tin measuring pot. There should, of course, be three tin pots each holding respectively the exact amounts payable to the diggers, carriers and working children. Another worker should follow close on the barrow and deal out a pinch of salt to every worker. The dependants, both adults and children, and the special gangs should be paid in the same way some time in the middle of the day. Method of paying.

When payments are made in cash, the cashier having been authorized overnight to issue the daily wages should early in the morning count out all the money required, that for each gang being put into a small bag bearing the distinguishing number of the gang and having enclosed in it a slip showing the amount contained therein. The bags for the gangs of each clerk should then be placed in a large bag bearing the name of the clerk. The cashier will then take the bags to the work, and in company with the clerk will make payments on the spot either to the individual or the gang, as may be ordered. For the purpose of receiving payment the gangs should be mustered in classes for attendance, and when individual payments are made each person should come forward in rotation in the order in which his or her name appears on the gang register and receive payment. If payment to the gang through the mate has been authorized, the cashier, when handing over the money to him, will make him count it out, and will then explain to the assembled gang the amount to be paid to the members of each class. The mate will then distribute it. Before moving on to the next gang the cashier will certify the payment made. He will then hand back the gang register to the mate and after completing his work will report to the Officer in charge.

If on any occasion the measurements for any gang are not ready at the time fixed by the Officer in Charge for disbursement to the workers, the Officer in Charge may give the cashier concerned a sum estimated to cover the requirements, who will in the course of the day pay the wages which measurement may show to be due; such an advance is merely temporary and must be accounted for on the day it is made. No entry will be made in the cash-book until the daily report of the clerk is complete for all his gangs.

Where the distribution of wages is made by mates, the clerk should check the distribution which has just been carried out and ask if there are any complaints of non-payment or short payment to any of the persons present. He should then check the balance, if any, which remains over after the distribution. The reasons for a balance should be enquired into and noted.

67. If the balance is due to the temporary absence of a worker (owing to illness or unavoidable cause), the amount due to him should be left with his relatives or the mate of the gang. If it appears that the worker has left the work, the amount due to him should be refunded to the Officer in Charge, and should in no case be redrawn. The absence will involve forfeiture of Surplus grain or cash.

the amount due. In no case must unpaid balances remain with the cashier or gang clerk after the close of the day. The Officer in Charge should immediately credit balances received in his cash-book, and no such credit should ever be re-opened.

Accounts of
Officer in
Charge.

68. The Officer in Charge should enter every receipt and payment of grain or cash in a book, each entry having a separate number in a weekly series. This should have separate columns to show the heads of allocation. It should be totalled daily. It will be a good check if the Officer in Charge is made to report these totals every day. The most convenient procedure will be for him to fill up a postcard on which something like the following form might be printed :—

State _____
Charge No. _____ Date _____
Work. _____

1. Number on the charge—

Workers.	Dependants.	Total.

2. Are people crowding in? _____
3. Quantity of work done _____ c. ft.
4. Expenditure for the day _____
5. Money left in cash and cheques, R _____
6. All gangs paid up to _____
7. Epidemics, or accident, or loot, etc. _____

(Sd.)

Officer in Charge.

This should not contain information that will do quite as well in the weekly reports. It will ordinarily be sent by post to the Central Officer, but it may be more convenient to send it by a special runner.

Hospitals and
kitchens.

69. A special procedure is, however, necessary for hospitals and kitchens. The accounts should be kept separate for purposes of inspection and control; but payments for diet and establishment should be made by the Officer in Charge. The Hospital Assistant or the kitchen manager may be given a permanent advance of ten rupees for petty contingencies if this is desirable. The attendance and diet registers should be kept in forms similar to those prescribed for civil kitchens; and at the end of the week or at shorter intervals, if necessary, the Officer in Charge should pay the bills direct to the person who supplied the food, not through the Hospital Assistant or kitchen manager. If a permanent advance is given for contingencies, it should be recouped weekly, or at shorter intervals, if necessary. All accounts should be cleared up at the end of the week in order that the details may be available for the charge progress return.

Submission of
miscellaneous
accounts.

70. The following papers should be submitted weekly by the Officer in Charge to the Central Officer for use in audit :—

- (a) A copy of his cash or grain book with vouchers for all contingent items of more than five rupees.
- (b) A copy of the hospital account.
- (c) A copy of the kitchen account.

Issue of gang
registers.

71. As a safeguard against fraud and an instrument of detection, the gang system of keeping the initial accounts is most valuable. The register forms should be kept and issued by the Officer in Charge. They should all be stamped with distinguishing numbers in the office of the Central Officer, and registers should be kept by that officer and by the Officer in Charge showing their disposal. During the operation of checking at the relief charge, the number of registers in use and in stock there should be counted, and the total added to that of the registers returned to the office of issue should tally with the number issued to the charge. No gang registers are to be destroyed on any pretence whatever. Every petty official whose end would be served by confusion will try to spoil them and will exaggerate the difficulty of keeping them up. This is so marked that inability to keep the gang registers in order may almost be regarded as the sign of a rogue or incompetent person. In either case the man should be removed. If it is the Officer in Charge himself who fails in this matter, there is the more reason why he should be replaced by a competent man.

72. The progress shown should be checked by test measurements extending over the whole work in a tank, or over any reach of a road work the recorded progress of which can be disentangled from the remainder. For this purpose it is well to have all the accounts of a road, or other long work, closed up at every four miles or so, and a new start made.

The numbers are checked by counting, the number of gangs at work along a road, etc., and sampling the total entries in the clerks' returns by careful comparison in detail for about 20 per cent. of the entries in the gang registers, as well as with the numbers actually found present. Any recent curious fluctuations in the registers require explanation. If anything throws doubt on the general accuracy of the returns, it is best to make a detailed enquiry and obtain some tangible results before going further.

The cash-book itself should then be carefully examined as usual, attention being paid to the character of the contingent expenditure. In the same manner the details of the hospital and kitchen accounts should be very carefully examined.

An examination should be thorough, but mostly in the way of sampling, unless something suspicious is lighted on, and in that case it should be searching. The way in which the accounts and records are kept is often a very good guide to what one may expect to find. If they are kept in such a manner as to facilitate check, careful sample checking will probably be found to be sufficient. If, on the other hand, the books are in confusion, it will be well to have a very complete examination; for either there is carelessness which many will have taken advantage of, or there is worse.

A knowledge of the total number of gangs of all kinds on or attached to the charge, including gangs employed on services in connection with it (*e.g.*, conservancy or the like), together with precise information of the places at which they are working, is the basis of a thorough inspection, and should ordinarily be obtained from the Officer in Charge before inspection begins. Later on the information may be checked by the register of attendance rolls issued; but it is important to take the statement of the Officer in Charge on this point at the outset. Otherwise, if the number of gangs is found short, the inspecting officer is likely to be told that the gangs not traceable are on the march, or engaged at some distance from the work; and such a statement will render his enquiries fruitless, if, as will often be the case, he has then no time to test the information.

It is also desirable, where possible, that, before making detailed inspection, the inspecting officer should ascertain from the last weekly charge progress return the incidence of the expenditure on the wages for the able-bodied gangs directly employed in executing the work in hand (*a*) for work done, (*b*) per unit relieved. These figures will indicate the general character of the work, and will be useful in checking the output of individual gangs. An extraordinarily low or an extraordinarily high incidence will naturally attract suspicion.

73. Having obtained the information referred to in the previous paragraph, the inspecting officers will be equipped for his inspection. As he passes along the work, all gangs should be told to stop work and muster in order by classes. This will prevent confusion and the shuffling of gangs. The following procedure will secure a thorough inspection:—

- (1) Count the number of gangs, and on the way select gangs for detailed comparison with the entries in the attendance rolls, of the numbers present, the work done and the payments made; and verify the entries of payment by enquiries from the gang, and the entries of work done by actual check measurements.

NOTE.—It is essential that this should be done on the spot, and enquiries should not be confined to one day's entries only.

- (2) See that no persons ineligible for relief are in receipt of it.
- (3) See that the numbers engaged on miscellaneous duties are not excessive.
- (4) Check the attendance rolls, specially noticing—

- (a) the difference (if any) between the sums drawn by the clerk and the sums paid to the gang, and the explanation given for the difference at the time, which should be noted for comparison later with the entries in the cash-book;

- (b) the price basis adopted, and the calculation of the wages;

- (c) the numbers shown at present on the two or three days before inspection.

NOTE.—The workers should be examined closely as to the names and particulars of any persons, previously shown as present, but absent on the day of inspection.

- (5) See whether the tasks are plainly indicated in advance, and are correct in size, and whether the gangs clearly understand what they have to do.
- (6) See whether the check measurements have been properly made, and whether they indicate laxity in the daily measurements, or abuse where a margin is allowed.
- (7) Take the the clerks of the selected gangs with their returns to the head-quarters of the charge, check the totalling of both payments and measurements in some of them and compare the totals with the corresponding entries in the books of the Officer in Charge.
- (8) Similarly in the case of gangs other than those selected compare the totals for the two or three days preceding with the corresponding entries in the books of the Officer in Charge.
- (9) Compare the totals of the clerks' daily returns with the corresponding entries in the cash-book.
- (10) Compare the accounts for hospitals and kitchens with the corresponding entries in the cash book, and test the expenditure by the incidence per head relieved.
- (11) Examine the expenditure on contingencies, scrutinizing the vouchers.
- (12) Compare the cash-book entries with the charge progress return for the preceding week or weeks.

Checking members and measurements

Inspection of gangs.

(13) Check the acquittance roll by the attendance book of the establishment, testing a few entries in the latte, and specially noting whether the establishment is excessive.

(14) Examine the comparative statement of expenditure and work done, as shown in the weekly charge progress return; compare the progressive expenditure with the estimate sanctioned for the work; and see that the progress of work done is roughly proportionate to the expenditure incurred.

74. The general responsibility of the Officer in Charge of a work is defined in the Code, and he should comply with the rules therein laid down.

He must see that the camp is laid out in accordance with orders, and that proper accommodation is provided.

Frequent inspections of the camp and work must be made by him; and he should see that all weak and sickly people are attended to, and that the medical representative at the camp does his duty in attending to all such persons.

In the event of gangs doing short work the reason should be ascertained and recorded at once.

Constant supervision of the tools, baskets, etc., is necessary, and the Officer in Charge should report promptly if more are required.

The Officer in Charge should see that the workers know their work and do it, and that each mate is able to point out the work allotted to his gang and also to state what each class of worker will get upon completion of the task set.

He should satisfy himself that all tasks are set out in due time and properly measured up. This can be checked by seeing if the people are working properly and then comparing the quantity of work done with the task set. Generally speaking the task is fixed on the assumption that the gang is to do a fair day's work of 8 hours.

According to the season a time-table for the workers and the duties of the subordinate staff must be prepared, and the time specified for starting and finishing work be made known to the workers by beat of gong or "tom tom." The number of persons to be employed in miscellaneous gangs and of cattle for water-supply operations to be strictly in accordance with the scale laid down by the Engineers by whom the rates of pay will be fixed.

Each Officer in Charge must keep up a diary in note-book form from day to day, in which he should record all details of miscellaneous information required for his weekly progress report and any other matter affecting the work or the people in any way.

No relations of any member of the staff should be employed in any capacity without the written orders of the Central Officer, and lists of all the staff, both superior and inferior, must be kept up.

75. The duties of the sub-overseers and work-agents are as follows:—

(i) To lay out the camp and construct quarters for the staff.

(ii) To lay out the work in advance and position of spoil banks or borrow-pits if required; to have profiles ready where necessary; to indicate upon the ground the plots upon which each gang is to work.

(iii) To mark daily in each plot the work to be done by the gang occupying it, having calculated the task in accordance with the rules laid down, and to point out to the mate and the gang the work which they are to do, the best way of doing it, and to explain to them what they will be paid.

(iv) To measure up the work done, and record it in his measurement book, the registers and clerks' books, and to assist the clerks in calculating the wages due to each gang.

(v) To assist in all works of construction and in connection with the water-supply, and in all other matters requiring professional knowledge.

(vi) To pay special attention to the following points:—

(a) Tools to be sufficient and in good order.

(b) Mates to be kept up to their duty of encouraging the people to work, and those in charge of spoil banks to see that the spoil is deposited in the places indicated to them.

(c) Gangs not to be crowded, and if lead is long, carriers to be taught to carry by relays.

(d) Baskets to be lined to prevent soil falling through the crevices.

(e) Weakly people not to be overworked.

(f) Each member of the gang to do his fair share of the work.

(vii) To report all defects at once to the Officer in Charge.

76. The clerks are—

(i) to keep up the registers and forms for which they are responsible;

(ii) to intimate to the people the rules in connection with bazar, water-supply, conservancy, hours of working, rates of pay, and method of payment;

(iii) to muster their gangs and record the attendance at the hours prescribed by the Officer in Charge, absentees being carefully indicated;

(iv) to drill the gang for purposes of attendance and payment in the manner laid down in

(v) to assist the sub-overseers and work-agents to keep the people working during the day;

(vi) to attend generally to all the requirements of the gang, bringing specially to the notice of the Officer in Charge in case of any persons requiring special treatment in any respect.

Duties of
Officer in
Charge.

Duties of sub-
overseers and
work agents.

Duties of clerks

77. The general responsibility of the Medical Officer attached to a relief work is defined in Chapter XII of the Code. Duties of medical officers.

- (i) His first duty in the morning will be to attend to the in-patients and see to their food, water, etc.
- (ii) He should then go through all the camps, examining any persons who may be there and taking note that the camps are kept clean.
- (iii) He should then go over all the work, enquiring from mates and clerks as to the health of their gangs. He should take with him a small basket or case containing any simple medicines and dressing for wounds which might be required, and administer these to any slight cases he comes across and which are not sufficiently serious to necessitate removal to the hospital.
- (iv) During this inspection he should note all thin and neglected children, and issue orders for them to be brought once or twice a day as necessary for special diet.

He is responsible among other things—

- (1) for removing all sick persons, who should be treated as in-door patients, to the hospital;
- (2) for taking steps for putting any persons on light labour or removing those on light labour to ordinary work;
- (3) for collecting all persons and children who ought to get special diet;
- (4) for arranging for food of in-patients and special diet;
- (5) for reporting at once the presence of any cholera or other infectious disease.

In the case of all complaints connected with debilitated digestive powers, quality of food, etc., such as dysentery and diarrhoea, he should invariably record in his note-book the statement of the sufferer as to the cause of the complaint with a view to ascertaining if any general action is necessary in such connection, *i.e.*, prohibition of any classes of food, direction for more careful grinding of meal sold, etc.

78. In recent famines the Government of India lent the services of officers of the Army, Engineers and officers of other Departments to many States for the work of supervision and inspection. They were of the greatest assistance to the Durbars and their deputation resulted in a marked rise in the standard of efficiency in all branches and, as a rule, in increased economy in the administration. When it is evident that relief will be required for over 20,000 persons for a period of three months, it will be advisable for the Durbar to apply to the Political Officer for the services of special inspecting officers in the proportion of one for every 20,000. These officers will constantly inspect all Departmental charges and other relief centres in the tract of country to which they are appointed and will report and rectify, so far as possible at the time, all errors found by them. They should keep up and submit weekly diaries direct to the Central Officer. On the closure or contraction of Departmental work their services can be utilised in the distribution of advances and gifts from charitable funds. So long as they are inspecting officers they should have no authority for executive initiative excepting in a case of extreme urgency. For their assistance a form of inspection note is given in the appendices to this Hand-book (Form No. 4). Special Inspecting Officers should send copies of their diaries and inspection notes to the Officer in Political Charge of the State. Special Inspecting Officers.

79. The advantages of village works and the general principles to be followed in making use of them as a means of affording relief are briefly described in paragraph 28 above. On the first warnings the Central Officer should examine the programme of village works with a view to testing its adequacy and deciding in what order the works will be opened. Non-departmental works should not be opened at the outset if a sufficient number of private works are available. Village works.

80. The Central and District Officers should use their influence to induce Thakurs, Jagirdars, large land-owners and others, who have undertaken or may be ready to open unaided private works, to commence them on the first warnings of scarcity. But they should not in any way interfere in the management of such works. The District Officer should be furnished through the Circle Inspector every Saturday evening by the persons who have undertaken such works, with a brief statement showing the nature of the work and the extent to which it affords relief. The following is suggested as a convenient form:— Unaided private works.

Labour Return, week ending Saturday, _____

Name of Village _____

Name of { Grantee or Manager _____

{ Relief Circle _____

Name and Nature of Work _____

Day.	Men.	Women.	Children.	Total number.
Sunday				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
TOTAL				
Daily average				

(Date and Signature.)

This should then be forwarded to the Central Officer for the information of the Durbar.

Where unaided private works are numerous, they may be grouped together in such numbers that they can be visited by one man daily and the Central Officer may appoint a clerk on, say, Rs 10 per mensem for the group.

The Circle Inspector and the Village Works Inspector (if any) should from time to time verify the numbers shown as attending the work and report to what classes and castes generally they belong; but they shall in no case interfere with the management.

81. It will sometimes be possible to encourage the execution of private works by the issue of advances to the same classes mentioned in the previous paragraph or even to petty landholders or to a village community as a whole. In issuing these advances the Durbar should fix for each district the average proportion recoverable.

Advances once sanctioned for any one tract may be given by the Central Officer for any work which has been entered in the programme of village works. In the case of works not entered in that programme advances may only be given after the work has been located, measured and estimated, and then only to persons who have proprietary rights in land or can give security for repayment, and in such cases the special sanction of the Durbar is required for any advance for a single work which exceeds Rs 500. If the proprietors of the land agree to the work being done by the villagers, advances may be made on the joint bond of the principal villagers.

In determining the amount of the advance the Central Officer should follow the estimates for works which have duly been entered in the programme. For other works the following are the highest rates at which estimates or advances should be made :—

	Rs
(a) Excavating tanks	4 per 1,000 cubic feet.
(b) Constructing or repairing embankments	4
(c) Excavating drainage channels	2 to Rs 3 per 1,000 cubic feet according to the hardness of the soil and other local circumstances.
(d) Masonry work	25 per cent. in excess of the ordinary local rate.

It will be found convenient to give out these advances by instalments, *viz.*, two-fifths before the work begins, two-fifths when it is approximately half finished and one-fifth when it has been passed as completed after due inspection. The Central Officer will find it useful to keep a register, somewhat of the pattern given in Form No. 5, of all aided private works.

82. The management will ordinarily be conducted by the grantee, and the control of the State officials will ordinarily be restricted to seeing that the work is regularly carried on, that wages are regularly paid and that the other conditions of the agreement are observed. Special care should be taken to prevent subordinate officials from harassing the grantees.

As regards measurements, it will ordinarily be sufficient, if the works have been properly located and measured out beforehand, to make a careful inspection of the work when it is about half done, as a preliminary to the second instalment of the advance and again to measure up the work when completed. If the final measurements agree substantially with those specified in the original estimate, the account should be closed, any difference being disposed of by the Central Officer.

The grantee should on every Saturday evening submit to the District Officer through the Circle Inspector a labour return in the form given in paragraph 80 above. Where aided private works are numerous, they can be grouped together in such numbers that they may be visited by one man daily and the Central Officer may appoint a clerk on a pay of about Rs. 10 per mensem for the group.

The Circle Inspector and Village Works Inspector (if any) should from time to time verify the numbers shown as attending the work and report to what classes and castes they generally belong. They should not interfere in the management, but should report at once if the Durbar advances are being misapplied.

83. Non-departmental village works should ordinarily, or mainly, be kept as a reserve against the outbreak of epidemic disease, or for the approach of the rains when it is desirable to disperse the people in the neighbourhood of their homes, but if it be found that only certain classes or castes are employed on private works, it may be necessary to open non-departmental works irrespective of these considerations. They should be carried out either (a) by non-official agency (*viz.*, respectable land-holders, or a local relief committee, if any, or other reliable persons in the neighbourhood under the control of the District Officer) or (b) by official agency appointed by the Central Officer.

If the pressure on non-departmental work is so great as to outweigh the non-official or official agency at the disposal of the Durbar, such works may be transferred to the Public Works Department for management on the principles herein laid down for Non-departmental works.

84. The procedure laid down for Public Works in a previous part of this chapter should, *mutatis mutandis*, apply to non-departmental works with the following exceptions :—

- The standard task for workers in Class I (diggers) shall be the full task commonly performed at the time of the year by labourers in ordinary times, and if workers in Classes II and III are employed on digging or some equivalent labour, their task shall be respectively two-thirds and one-third of the task of Class I.
- Payment shall be made at such intervals as the Durbar may prescribe, but not less often than twice a week.

Aided private works.

Organization on aided private works.

Non-departmental works.

Procedure on non-departmental works.

(c) No dependants shall be relieved, nor shall a hospital or market ordinarily be arranged for.

(d) There will be no rest-day allowance.

(e) Working mothers will receive no allowance for infants in arms.

85. Where village works are likely to be numerous they should be supervised by a village works inspector, who should ordinarily be appointed by the State Engineer, but should work entirely under the orders of the Central Officer. Village works inspector.

86. The Manager of each work will ordinarily be kept in funds or in grain by periodical advances, and the procedure laid down for aided private works should be followed. But in addition to the Labour Return given in paragraph 80 above, he should submit a weekly abstract to the District Officer of the work done and expenditure incurred. Form No. 6 gives all the information required. Returns from non-departmental works.

A register somewhat in the form given in Form No. 5 with the necessary alterations in the headings should be kept up by the Central Officer and periodically submitted for the information of the Durbar.

Attendance should be recorded daily, but payments should be entered only on the dates on which they are actually made.

87. The village works inspectors should be professionally qualified men. They should have no clerical establishment, but may be allowed one or two peons each. They should specially attend to the following matters :— Duties of inspectors.

(a) What classes are admitted? and is the system of exclusion of ineligible persons adhered to?

(b) What is the condition of the workers?

(c) What establishment is there?

(d) Is the work marked out in advance? Do the people understand what they have to do?

(e) What is the task? What proportion of the full task is done?

(f) At what hours is the mustering done; are the returns correct and up to date? Are the entries always made in ink and totalled without delay? Specially examine any great variations in the numbers attending on successive days.

(g) At what intervals are wages paid? Is there any complaint of delay? Is the proper price-basis used?

(h) Are measurements always completed before payments are made; check them by actual measurement.

(i) What percentage of the full wage is earned?

(j) Is the balance in hand excessive?

(k) Is the dead-stock register properly maintained?

(l) Specially examine the incidences of expenditure for work done and per unit relieved first for the last week and secondly up to date. Look up the sanctioned estimate and see that the progress made is roughly proportionate to the expenditure incurred.

CHAPTER V.

Gratuitous Relief in Villages and at State Kitchens.

83. In their report the Famine Commission of 1901 divide the total number of units relieved into two great classes—(a) those relieved as workers, (b) those gratuitously relieved in any way. The latter class therefore includes dependants on works, those relieved gratuitously at their own homes, those relieved in poorhouses, and those relieved in public kitchens. There is no branch of famine administration in which it is more difficult to hit the happy mean than gratuitous relief. Even if it is begun in time, there is difficulty in deciding how far it is right to go. Without desiring to lay down any hard and fast rules, the Commission considered that with good administration the numbers relieved gratuitously during the dry hot months ought not to exceed one-third of the whole. But in the rains the number on works dwindle away, while the need for gratuitous relief increases, and therefore in the rains no proportion can be maintained between the workers and those in receipt of gratuitous relief. Taking the whole period of a famine, they were disposed to think that gratuitous relief ought nowhere to exceed an average proportion of 42 per cent. General.

These opinions referred, of course, only to British India. Gratuitous relief to the needy at their own homes has hitherto been rarely disbursed at the cost of Durbar funds in Native States. It has been generally felt that the sick and infirm were the proper charge of their wealthier neighbours, and that they could be left to the natural system of human charity. Experience also showed how difficult it was owing to the great lack of trained establishment to maintain the necessary checks and tests similar to those enforced on relief works or in poorhouses. In a Native State therefore the greatest care is necessary in extending the limits of this class of relief. Persons of the description given in section 48 of the Code who possess able-bodied male relations should not be admitted to gratuitous relief unless the District Officer is satisfied that special circumstances warrant such indulgence.

92. Inspecting officers should see—

Inspections.

- (1) that the persons relieved are eligible, and that no persons have been wrongly excluded or overlooked;
- (2) that the numbers relieved are correctly recorded in the village list;
- (3) that the amount distributed in the village is the amount due, and corresponds with the amount drawn.

The following procedure will secure a thorough inspection :—

- (a) Muster the paupers (other than *parda-nashin* women), comparing their relief tickets with the village list, and testing the entries in them by personal enquiry.
- (b) See that the entries are in ink, that the columns have been duly totalled, and that a line has been drawn through all the blank payment columns when relief has been discontinued.
- (c) See that the correct price-basis has been used, and test the arithmetic of a certain number of entries.
- (d) Compare the payments shown in the village list with those shown in the cash book.
- (e) Verify the balance with the distributor.

93. In section 49 of the Code it is provided that gratuitous relief may be given by the Kitchens. issue of cooked food in kitchens. The conclusions regarding this form of relief at which the Government of India have arrived are as follows :—“The value of kitchens as tests of distress depends upon the fear of social isolation which attends a breach of caste rules; and it is obvious that as the number of persons attending them increases, the fear of isolation rapidly diminishes, and with it the value of the test. In the last famine (1899-1900), in the tracts where the abuse of kitchens was most conspicuous, the people had become accustomed to their use in the famine of a few years before, and they were thus, at the very commencement, in a position at which a new generation would not arrive until a future famine was well established. It is not to be wondered at, therefore, that the kitchens failed as tests; but under more normal circumstances they may, in the opinion of the Government of India, have a substantial value as test of distress in the first stages of scarcity, when it is uncertain whether real need for relief exists. The Government of India also recognize the great practical advantage which they possess in the readiness with which they can be opened and closed without any elaborate organization. On the other hand, their use as tests is undoubtedly open to two objections. Where caste feeling is strong, they may furnish too severe a test. And in all cases the test is unequal, being more severe amongst the higher than the lower social grades of the poor, though the force of this objection is diminished by the fact that, broadly speaking, it is the latter who first feel distress, and that, when the necessity for relief has reached the better class, the time for test kitchens has passed. Where the social organization is such as to give special force to these objections, great caution is necessary in the resort to kitchens as tests of the existence of distress; but as a means of affording gratuitous relief to those unable to work, the Government of India must accept the overwhelming testimony in many Provinces in which this form of relief has been tried, in favour of the great value of kitchens when properly managed, especially, but not only, in the case of children. They have, therefore, decided not altogether to abandon the use of kitchens as a means for the distribution of relief; but they desire to emphasize the necessity for the most careful management in the cooking of the food and in the sanitary arrangements. The selection of those to be relieved must also be as rigid as in the case of the dole, and resort to the kitchens must not, after the earliest stages, be relied on as an automatic test of distress. Two further points of importance are that the circle served by the kitchen should be moderate in extent, and should not in the rains extend beyond the village in which the kitchen is situated.”

These institutions have rarely been popular with the Durdar or the people in Native States, but the following instructions are given for their organization where it is decided to maintain them. These instructions, which are meant only as a guide, are equally applicable to kitchens on works and kitchens for the issue of gratuitous relief to people at their homes.

94. (a) A kitchen should consist of one or more cooking sheds, a water-shed, store-room and one or more eating-sheds. The whole should be surrounded by a screen, of which the gateways should be at least 16 feet wide. The outer and partition walls of kitchens should ordinarily be screens of lattice, bamboo, or other light form of fencing, stiff enough to prevent egress and ingress, but admitting of immediate removal or levelling in case of fire. There should be at least two entrances to the enclosure, with temporary doors; if possible, one entrance for each mess should be arranged. No inflammable material should be erected or used within 25 feet on each side of the entrances. A ditch should be dug round the whole enclosure so as to prevent superficial drainage flowing into it; and, to carry the inside drainage, small open drains should be made leading from the enclosure into the ditch.

Organization of
kitchens.

(b) The eating-sheds should be separated by a suitable interval from the cooking-sheds, to avoid risk from fire. The floors of the eating-sheds should be raised above the surrounding surface to ensure proper supervision.

(c) Kitchens for the relief of dependants on work should not be located at great distances from the works. When relief works extended over widely scattered areas, several smaller kitchens are more convenient than one large kitchen. In the case of village kitchens the circle served by the kitchen should be moderate in extent, and should not in the rains extend beyond the village in which the kitchen is situated.

(d) Every person on first admission to a kitchen should be furnished with a tin ticket, on which should be stamped the number of the kitchen, the number borne by the mess, and the person's number in that mess. The ticket should be worn round the neck at meal times.

In the case of kitchens for dependants of relief workers, the tickets for admission will be issued under the orders of the Officer in Charge. The gang mate should bring to the kitchen such of the dependants in his gang as are fed in kitchens. The Superintendent should keep a record of the number of dependants of each class present at each meal, and report the same to the Officer in Charge every evening.

No person not on the kitchen establishment should be permitted to remain inside the enclosure after meal times.

An admission and attendance register should be kept up for all persons relieved in State kitchens. (Form No. 9.)

(e) The people should be divided into sections so far as caste and religious rules forbidding eating together renders this essential; to each section should be allotted a separate feeding place marked by a suitable flag—white, blue, red, or green, etc. If necessary, each section should be sub-divided into messes of a convenient size. The people of each mess should be arranged at meal times in groups according to the class of ration to which each person is entitled.

(f) There should be two meals, morning and afternoon. The Central Officer should fix the times for the meals in consultation with the Medical Officer. It is important that the meals should be regular, in order that inspecting officers may be able to time surprise visits. Half an hour before meal time the Superintendent should call the attendance register. As soon as a person's name is called, he should enter the enclosure and obtain from his mess cook his eating utensils, and then sit down in his usual place in the eating-shed of his mess. Children who are unable to take care of themselves should be admitted along with the person in charge. If the person attending has no plate or vessel of his own, he should be furnished with one. *Dhak* leaves stitched together will serve as plates.

All food supplied should be eaten in the eating-sheds. The removal of cooked food should be strictly forbidden.

(g) The following establishment should be provided for a kitchen serving 300 persons:—

One Superintendent.	Three water-women.
Two warders.	Two cooks.

Two scavengers.

NOTE.—Extra cooks may be provided on the scale of one for every 100 in excess of 300. A similar extra establishment of warders, water-women, and scavengers is permissible.

(h) The Superintendent will be under the immediate orders of the Officer in Charge in the case of a kitchen on a public work, and of the Circle Inspector or other authority appointed by the Central Officer in the case of civil kitchens. He will be responsible for the maintenance of discipline, the carrying out of regulations, the cleanliness of the kitchen and its surroundings, the sufficiency and purity of the water-supply, and the condition of the persons attending the kitchen. He should obtain daily, on indent from an agent appointed for the purpose, the supplies required for his kitchen. He should personally weigh and distribute the uncooked rations for each mess twice daily. Where the rations admit of such treatment, the component items should be mixed or soaked before being given to the cooks, as this will deprive them of most of their saleable value. After the morning issue he should place the grain remaining under lock in the storeroom of the section for which they have been procured. After the issue of the uncooked rations he should give out to each mess cook the eating utensils in use by his mess or messes, and after each meal inspect the utensils to ascertain that they have been cleansed and, after seeing them put into their respective baskets, lock them up in the store-room. He should remain till the kitchen is closed.

(i) Warders should be appointed to each section of the kitchen. They should maintain order among the applicants for food and observe, as far as possible, the issue of the rations, at once reporting to the Superintendent if they consider a short ration is issued. At the end of each meal they should carefully inspect each applicant as he goes out, to see that neither cooked food nor utensils are removed. They should also ascertain that the servants on leaving the kitchen do not take away any food or utensils belonging to the kitchen. One warder must always be on the premises of the kitchen to prevent unlawful egress or ingress. The warders should sleep in their respective sections every night.

(j) The cooks should carry the supplies required for their respective messes; they should be present one hour and a half before each meal to receive the uncooked rations and eating utensils of their respective messes, and should cook and distribute the food. After each meal they should collect and cleanse the eating utensils of their messes and replace them in the store-room.

(k) The water-carriers assisted by the scavengers should thoroughly clean their respective sections after each meal, the rubbish they collect being deposited in a fixed place for removal by scavengers. They should fill the filters for drinking and culinary purposes and supply all water required during meal times; and move among the inmates, ready to supply water to anyone asking for it.

The cooks and water-carriers should be chosen with reference to caste requirements.

The ground round the kitchen should be cleaned daily, the latrine areas should be cleaned after each meal, and the ordure removed and buried or burnt.

(l) The Superintendent should total the attendance register after every meal. From it every evening he should post up the diet register, and prepare from the total entries an indent of the supplies required on the following day. The indent of food for any one day will thus

be based on the attendance of the previous day. If a number of persons are admitted in the course of the day, a supplementary indent should be submitted, the necessary entries being made and explained in the diet register. The agent supplying the food should keep all indents for at least a month in case they should be called for.

(m) The Superintendent of a civil kitchen should be given a permanent advance, sufficient for a fortnight's expenditure. From this he will meet all charges, including those for establishment. He should pay the food bill on the last day of the week.

The Superintendent should keep up a register of all non-perishable property in the kitchen and should submit every Saturday evening to the District Officer a weekly return. (Form No. 10.)

95. There are two times when inspection should be made :—

Inspections.

- (a) When the uncooked food is served out;
- (b) When the cooked food is being distributed.

Surprise visits are absolutely necessary, and it will be impossible to check the distribution of uncooked food, the attendance, and the distribution of cooked food on one day satisfactorily. The following procedure will secure a thorough inspection :—

- (a) Check the register of admission and attendance.
- (b) Check the totalling of the cash-book, and compare it with advices of amounts received from the Durbar.
- (c) See that the establishment have received their wages and that their numbers are not excessive.
- (d) Enquire into any unusual contingent expenditure.
- (e) Specially examine the prices charged for the food supplied; if necessary, making enquiries in the village.
- (f) See that the recipients of food have their tickets, know their ration, and feed in regular groups.
- (g) Note the condition of the children who have been for some time at the kitchen.

NOTE.—If the condition of the children is good, the presumption is that they are receiving their full ration; while if it is bad, the presumption is that there is leakage of food.

- (h) At meal times note the quality and the consistency of the food, and enquire from the recipients whether they usually get food of that kind.
- (i) Check the dead-stock register.
- (j) Note carefully the incidence of expenditure per head relieved (a) for diet only, and (b) for total expenditure.

Members of relief committees and other respectable persons residing in the circle should be encouraged to visit civil kitchens and record their impressions in an inspection book, which should be kept by the Superintendent. Copies of all inspection notes recorded in it should be forwarded without delay to the Central Officer.

96. It is provided in section 51 of the Code that as many of the recipients of gratuitous relief in their own homes as can work should be given some employment, such as spinning, grinding corn, or winding silk. Of these, grinding is usually the most difficult to manage, owing to the facilities for fraud which it affords and to the difficulties which may be experienced in disposing of the flour. It may be possible, however, to find a market for the flour in poorhouses and on works, and, if difficulties arise, the amount of corn ground should be confined to that which can be disposed of, as the flour will not keep fresh for long after it is ground. Similarly difficulties may arise with regard to spinning. Cotton of a suitable quality may be very difficult to obtain at reasonable rates, and the thread may be poor. But no hard-and-fast rules can be laid down; the expediency of getting some return for the relief granted, where the person relieved is capable of doing some work, will be admitted by everybody, and the question how best to secure the end in view must be faced and solved, as well as circumstances permit, under the local conditions prevailing.

97. When the hot weather is approaching, or indeed whenever the health of the district begins to get generally affected, and the death-rate rises, people often leave the works and go back to their villages suffering from guinea-worm, fever, and other ailments, or perhaps because the conditions on a certain relief work are too strict, and the treatment there is unsympathetic. It is then very important that the local officers should know what is happening to these persons, and all Circle Inspectors should be required to report with their weekly returns the number of people who have come back to their homes during the week, the condition they are in, the steps taken to relieve those who are eligible for admission to the lists of those gratuitously relieved, and what the remainder are doing. Officers inspecting villages should also pay special attention to this point.

Relief for persons leaving works.

CHAPTER VI.

Poorhouses.

98. The object of poorhouses is to collect and relieve helpless wanderers at the end of their resources and paupers sent adrift by the contraction of private charity. The latter especially gravitate at an early stage towards the towns, and poorhouses should therefore be opened to receive them. They should not be employed to test the need of any persons to

General.

receive relief, but at a later stage they may appropriately be used for contumacious idlers. And it must be borne in mind that even with an early and efficient distribution of gratuitous relief in villages wandering cannot be stopped and poorhouses cannot therefore be dispensed with. Their establishment should never be deferred until the opening of relief works and the commencement of gratuitous relief. They cost little, they can do no harm, and they may postpone, for a time or altogether the necessity for more extensive and costly measures of relief.

Number and
size.

99. The number of poorhouses should be determined by the Central Officer with the sanction of the Durbar. Each should not ordinarily accommodate more than 500 persons. Sometimes the number in need of poorhouse relief will exceed this scale, and then it becomes a question whether the accommodation in a particular poorhouse should be extended or whether a new one should be opened at the same town in which one already exists or at some other place. In coming to a decision on the point one must be guided by local conditions. Though the limit of 500 inmates per poorhouse should not ordinarily be exceeded, there may be special facilities, such as existing buildings which can be utilized with advantage and which may conceivably outweigh the obvious objections to having a larger number.

Selection of site.

100. The chief points to be borne in mind in the selection of a site for a poorhouse are that it should be healthy and well-drained, not too near the town, as in that case there may be difficulties in regulating the admissions properly, in preventing people from slipping out and wandering away or begging, and in keeping out disease; nor too far away from the town, as in that case there are difficulties about supplies, the non-official visitors will not perform their duties properly, and the supervision will not be so thorough as it ought to be. It is usually possible to find some garden or enclosure with a good wall round it near the town which can be procured for the purpose, and, if otherwise suitable, advantage should always be taken of such, as it will save so much in the expense of construction. Where it is anticipated that poorhouses will be required for the greater part of year, it will save money in the end if fairly substantial buildings are erected. Grass screen enclosures with thatched roofs are very troublesome to keep in order, they get old and unserviceable very quickly, and if the famine is severe it will probably be found difficult to renew or repair them owing to the dearth of suitable thatching grass. They are also difficult to keep clean or to disinfect, an important point when cholera is feared; they are far from substantial and suffer much from dust-storms, which are usually particularly violent in famine times owing to the lack of rain; and finally they are liable to catch fire. It will usually be found better and more economical to run up *kachha* walls and roof the barracks with ordinary country roofing. Separate work sheds should be provided and also an enclosure for the children to play in. It will usually be unnecessary to provide separate sleeping barracks for children, who should be allowed to sleep with their parents; the growing boys should, however, be made to sleep in the men's enclosure. The enclosure set apart for families may conveniently be portioned off by screens or light partition walls into compartments so as to provide a certain amount of privacy. Unattached small children should be put in charge of one of the matrons.

Admission.

101. An enclosure should be railled off in front of one of the doors of the poorhouse for reception of applicants for admission. A peon will always remain on duty to direct applicants to this enclosure. A member of the Committee of Visitors and the Superintendent of the poorhouse will attend at the enclosure at a fixed hour morning and evening and, with the Medical Officer in charge, inspect the applicants. In accordance with the opinion of the latter, those entitled to admission shall be sent to the poorhouse hospital, segregation hospital, or enclosure for new arrivals as their respective conditions may require. If the severity of famine render it necessary, some official with a supply of cooked food should be present at all hours of the day. The name of each person admitted should be entered in a register (Form No. 11) and a wooden or tin ticket should be given to each to be produced whenever required. A duplicate ticket should be hung over the place assigned to each inmate. The inmates of the poorhouse should, as far as possible, be divided into gangs placed under the supervision of a gangsmen, who should be responsible for their orderly conduct and compliance with the rules of the institution. The members of one gang should, as far as possible, occupy the same yard, sleep in the same shed, eat meals in the same place, and after meals go together to the same work in the same place.

Food

102. The food should be distributed twice a day, unless the Medical Officer, with the sanction of the Central Officer, directs that only one meal a day be given. If necessary, a stock of food can be stored, but ordinarily it will be sufficient to contract with a merchant to provide the daily requirements. Every evening there should be enough grain in store for two days' supply and enough flour for the next day, the grain being ground every day for the food of the following day. The flour should be carefully weighed out for cooking and a definite relation fixed by experiment between the weight of the raw and the cooked food, and the latter should be tested constantly by weighment by the Superintendent and the visitors, who should also see that the food is thoroughly cooked and is served in as palatable a state as possible. The pulse should contain a certain quantity of pepper and spices, according to local custom. The cooking operations take time and the earlier cooked *chapatis* are therefore cold and heavy; the later cooked and warm rations should be issued to the very old and toothless and the earlier to the more robust. Care should be taken that the flour is of the very best quality, as the presence of husk or any foreign matter may give rise to bowel diseases. It will often happen that the people on first arrival are too weak and exhausted to be able to digest flour *chapatis*, and it is then better to give them boiled rice and *dal* for the first few days until their digestions have improved. This is especially the case with children and old people, who often

contract diarrhoea if given a solid ration on arrival. The soup known as *dalia*, which is made by mixing one *seer* of flour with five *seers* of water and one *chattak* of salt, the mixture being boiled down to about four *seers*, is a refreshing diet, not too heavy to endanger constitutions weakened by starvation. *Chapri* (or *kisari*) *dal* should never be used in a poorhouse.

The inmates should be arranged in rows in the feeding sheds in their own enclosures, and the number of rations required for each enclosure should, after being counted by an official at the cook-room door, be taken to them and distributed. A saucer or pot should be given to each inmate in which to receive the liquid portion of the meal. They should be supervised while eating their meal, and not allowed to get up till it is eaten or to give any away.

Children of about the same size (not necessarily age) should be fed in gangs and the ration assigned accordingly. Special care should be taken to see that the children are not deprived of any part of their meal, and that they do not save any part of it for their parents.

103. Drinking water should invariably be drawn from a well outside the poorhouse. The Water-supply. well should be carefully preserved from contamination, disinfected once a fortnight, and no one allowed to draw water from it except the staff appointed for this purpose, who should be of appropriate caste. If possible, a second well should be reserved for drinking purposes and kept closed until required when it should be disinfected and worked for about 24 hours before being used for drinking purposes. Empty kerosene tins or iron *dols* should be kept stored and cleaned frequently so as to be ready in case epidemic breaks out and it becomes necessary to get water from a distant well. The water required for use during the day should be stored in *matkas* (earthen jars) or in *dols* (iron vessels) in the water house, whence it should be supplied by means of a *piao*, with a metal channel or pipe, to persons requiring it. No person except the water-carrier in charge should be admitted to the water-house.

A separate well should be kept for bathing and washing clothes at some distance from the poorhouse and the drinking well. It should have a trough or bath, to which the paupers should be marched in detachments to bathe, as often as is thought good, with reference to the climate and time of the year. Another trough should be used for washing clothes in.

104. The Medical Officer will be responsible that all the requirements of a hospital are Medical Officer. provided, and that the sheds are dry and ventilated. He should send in to the Superintendent a daily return showing the number of sick in hospital, the daily admissions, discharges, and deaths, and the number of rations and the quantity of extra food required for his patients. He should also keep up a nominal register of all admissions, their diseases and history. He should constantly inspect the inmates of the poorhouse, to see if they are improving or the reverse; and give out-door treatment to those in need of it, not forcing them to enter the hospital unless this is absolutely necessary; for those who are specially emaciated he should prescribe special diet, such as milk or *ghi*, etc. He should report at once to the Superintendent or the Civil Relief Officer any insufficiency or badness of the food. He should also report to the Superintendent if he thinks that in any case the work exacted is too severe for any of the inmates.

The medical subordinate in charge should be well acquainted with the symptoms of relapsing fever. The occurrence of a relapse in fever after a remission of a week should excite suspicion. The fourteenth day after the commencement of a primary attack followed by a remission is the one upon which the relapse is most likely to occur. Should such a case occur, it is desirable to isolate the patient. The gums of all inmates should be examined in case of scurvy. The issue of a ration of vegetables twice a week is very desirable. In the absence of vegetables, *amchur*, fleshy calyx of *patwa*, or fresh limes should be given.

105. Two night latrines with earthen or iron receptacles should be provided inside the Sanitation enclosure. Other latrines are best provided on the trench system with a movable screen. They must be at a sufficient distance, but not too far away. Many of the inmates of the poorhouses will be friendless, very old, blind, and lame; and a boy or able-bodied individual should, if possible, be told off to help any such person to the latrine, etc.

Every inmate should be provided with a piece of *chattar* to sleep on over the grass or straw in the hut, and he should be made to bring it out every morning, as soon as the sun is well up, and expose it to the sun on both sides for an hour. The grass and straw should similarly be removed, shaken up, and exposed to the sun twice a week. The issue of blankets will nearly always be necessary. In the absence of these, stout "gunny" cloth is better than nothing.

The latrines in the poorhouse should be worked strictly on the dry earth principle, and the utensils should be of glazed pottery. In structure and mode of service they should be on the same plan as latrines in jails. All ordure, urine, and litter must be deposited in trenches not less than one foot deep dug at a distance of at least 200 yards to leeward (with reference to the prevailing wind) of the poorhouse. The portion of the trench in which refuse or filth has been deposited must be filled up with earth daily.

Once a week the walls of all rooms and sleeping sheds in the poorhouse should be mudwashed (*leaped*) up to a height of at least 6 feet, and preferably up to the roof. Every day the doors and windows of all rooms should be opened for some hours to allow of free change of air and ventilation. Personal cleanliness should be insisted upon. The inmates should be required to wash their clothes at least once a week.

Strict cleanliness must be maintained in the cook room. The cooking vessels must be kept clean and well scoured. The water used in the cook-room, as well as for drinking purposes in the poorhouse, should be filtered in the ordinary manner through a *ghara* as in the tripod set of them commonly in use. The sand for the filter should be sterilized by heat before being brought into use. If any disease, which is commonly communicated through drinking water,

has appeared in the poorhouse or its neighbourhood, the water should be boiled. If the water supply for drinking is from a river or running stream, it should be drawn at a ghat expressly set apart for the purpose, and chosen at some site above any general source of pollution, such as bathing, washing clothes, etc., etc.

All inmates of a poorhouse should be warned against exposing themselves to draughts, chills and damp, especially at night time, and in an unprotected state of body. Bodily warmth and protection against sudden changes of temperature and atmospheric humidity are of more essential importance to people in their condition of life than any other sanitary requirement.

Epidemics.

106. If cholera or other epidemic disease break out, the following procedure should be adopted:—

- (1) The water-supply should be at once changed, the former source of supply being effectually closed. The new wells should be disinfected with permanganate of potash before being brought into use.
- (2) All food (except grain actually stored in the poorhouse at the time of the occurrence of the outbreak) should be destroyed.
- (3) Six inches of earth should be removed from the floor of the barracks. If the roof be thatch, it should be burnt.
- (4) The trenches in use should be filled up, the grass screens burnt, and a new latrine erected on an entirely new site.
- (5) All drains should be washed down with a solution of perchloride of mercury (1 in 1,000) and hydrochloric acid (1 in 500).
- (6) If there is over-crowding, the inmates of the least infected barracks should be separated into small gangs; and any gangs remaining free from disease after five days should be drafted off to a suitable locality, after bathing and having their clothes thoroughly disinfected by being put into a cauldron of water boiling on a fire.

Establishment.

107. The establishment of a poorhouse should ordinarily consist of—

- | | |
|---------------|--------------------------|
| | 1. A Superintendent. |
| | 2. A Hospital Assistant. |
| | 3. An Accountant. |
| Approximately | 4. Cooks. |
| two per 100 | 5. Water-carriers. |
| inmates. | 6. Sweepers. |
| | 7. Overseers. |
| | 8. Peons. |
| | 9. A gate-keeper. |

NOTE.—Monitors should, where possible, be appointed from the inmates, some extra grain up to $\frac{1}{2}$ lb. per diem ($\frac{1}{4}$ seer) being given as remuneration.

When the poorhouse is not in the neighbourhood of a dispensary, the Hospital Assistant will ordinarily (except in the case of very large poorhouses) be appointed Superintendent. When a poorhouse is in the neighbourhood of a dispensary, there will be no need for a Hospital Assistant, but a Superintendent will be required.

Superintendent.

108. In the case of small poorhouses the Superintendent may be honorary, where a gentleman of the neighbourhood consents to undertake the duties, but in poorhouses where the number of inmates exceeds 200 there should as a rule be a Superintendent who should devote his whole time to the institution. His duty is general supervision including the maintenance of discipline and the enforcement of sanitary regulations. In particular he should—

- (a) attend at the admission enclosure morning and evening at fixed hours, dispose of applicants, and see that they are duly registered and brought upon the nominal roll for which a convenient form is given in Form No. 12;
- (b) examine the grain received from the contractor, test its quantity and quality, enter it in the stock-register, and see that it is securely stored under a good lock or sufficient guard;
- (c) attend at feeding time, and see that the food is correct in amount and well cooked;
- (d) muster the establishment daily, record their attendance in a register, see that they do their duties, and that all forms and registers are properly kept up;
- (e) see that the inmates are duly organized into gangs and parties, given suitable work, and do it;
- (f) daily inspect the sleeping quarters after they have been swept, and the latrines after they have been cleaned morning and evening;
- (g) pay special attention to the water-supply and satisfy himself daily that it is pure.

Cooks.

109. The number of cooks will vary from 1 to 2 per cent. according to the food to be cooked and the physical state of the poorhouse inmates; for where the latter are very feeble, more cooks will be required to carry and distribute the cooked food than where there are able-bodied inmates who can be so employed. They must be of such castes as shall not offend the prejudices of the inmates; and, if available, they may be selected from among the inmates.

As a rule, the cooks should be paid in grain, which may be given uncooked, if desired, at the rate of $1\frac{1}{2}$ lbs., or for exceptionally hard work, 2 lbs. a day. Where the numbers of inmates are large, the head cook may receive Rs 1 per mensem in addition. It may be necessary in some cases to arrange that, in addition to their food, the cooks should receive a monthly wage at the rate of $1\frac{1}{2}$ annas per diem to males and of one anna to females. They will be liable to fines for misconduct, or to stoppage of pay for short delivery of rations.

As the rations are given out to the messes by their own cooks, the responsibility is limited to them; and should any deficit exist, it should at once be made good by a minor indent on the store-keeper, the cost being recovered from the pay of the cooks concerned.

110. Water-carriers (women for choice) should be selected from among the appropriate castes and from the inmates if possible. If inmates are not willing to do this work for an extra $\frac{1}{2}$ lb. of flour per diem, outsiders should be employed. Every morning and evening they should fill up the water-pots in the sleeping quarters and feeding enclosures, and supply the cook-room and water-house. The number may vary from 1 to 2 per 100 inmates. Water-carriers and sweepers.

Sweepers should be selected from the females in the poorhouse and convalescent ward of the hospital. They should receive Rs 1 per mensem in addition to their food. Every morning, on return from the latrines, they should sweep up the whole area of the poorhouse under the superintendence of a warder; after meals all rubbish collected should be deposited outside the enclosure in some selected spot, from which it will be removed by the scavengers.

At 5 A.M. the men scavengers should remove the night *chatties* and clear out the latrines, and in the evening they should replace the *chatties* and again cleanse the latrines, and fill up the latrine water-pots. During the day they should remove the sweepings from the enclosure, and dig pits for the reception of night-soil.

111. There should ordinarily be one overseer to every 150 inmates. He should be of good caste and, if possible, be literate. He should be given his food and one rupee a month extra. His duties are to marshal the inmates for meals and supervise the work of the gangs. He will also act as gangsmen or monitor. Females should be appointed for the women's enclosures. They should have a portion of the shed walled off for them. Overseer.

112. At 5 A.M. all inmates in the poorhouse should be turned out to the latrines by the warders on duty; they will then be escorted by the warders to the place set apart for ablution: at 8 A.M. they should return and at 8.45 the first drum should be beaten; they should then fall in by messes in the feeding-enclosure to receive food; the sweepers should afterwards sweep up the camp enclosure, and the water-carriers should fill up the water-pots and supply the cook-room; those whose turn it is to wash clothing should go in charge of a warder to the place set apart for this purpose. All inmates should return at 4 P.M. At 4.30 P.M. the first drum for the evening meal should be beaten; after this the enclosure should be swept up; at 6 P.M. the inmates should fall in by messes for roll-call, and then be sent to the sleeping quarters. Daily Routine.

N.B.—The hours given above are merely as examples; a time-table should be drawn up for each poorhouse by the Medical Officer in consultation with the District Officer, which should be altered from time to time as necessitated by the changes of season.

Eating vessels should be supplied to messes. When any member of a mess leaves, the vessels should be returned to stock, a receipt for them being taken by the Overseer; those that are in use should be in the charge of the mess cooks. After the evening meal they should be placed in a shed set apart for them and the mess cooking-pots. This shed should be locked by the Superintendent. The eating vessels of each mess should be kept in strong baskets provided for the purpose. If any vessel is missing at meal time, the Overseer should report the fact to the Superintendent, and after each meal he should personally see that the mess cooks get back the proper number.

The cooks should be furnished with tin vessels for measuring the rations of food cooked in bulk; the food should be carried in a large open basket by one or two of the gang, and the male cook should serve it out.

Work should be of a light description, such as supplying water, sweeping enclosures, repairing fences or huts, rope-making, spinning, basket-making, etc. Rice cleaning or grinding is suitable work for women of respectable castes; two women in good health should easily grind 30 *seers* of grain a day, or enough for 60 adults; but if they are enfeebled, two relays of two women each should be allowed for each mill.

113. In addition to keeping up Forms Nos. 11 and 12, the Superintendent should submit to the District Officer for transmission to the Central Officer a weekly return (Form No. 13) showing the number of persons relieved and the expenditure. Returns.

114. Inspecting Officers should pay special attention to the discipline and sanitation of the poorhouse, seeing that all persons able to do some work are given work. They should also— Inspections.

(a) check the attendance by the nominal roll and admission register, comparing the two; see that the departure of an inmate is properly recorded, and that the word "*kharij*" is written across the blank columns of the nominal roll;

(b) check the diet issues by the nominal roll;

(c) examine the stock register, counting the stores in hand, and comparing issues with the corresponding diet issues;

(d) see that the price charged for the stores is fair;

(e) muster the establishment; see that they have received their wages, and that their numbers are not excessive;

(f) enquire into any unusual contingent expenditure;

(g) specially enquire into cases of persons on special diet, and see that they get it;

(h) see that the inmates feed in messes, and know their rations;

(i) note the expenditure per head relieved (a) for diet only, (b) for total expenditure.

Members of relief committees and other respectable persons residing in the circle should be encouraged to visit poorhouses and record their impressions in an inspection book, which should be kept by the Superintendent. Copies of all inspection notes recorded in it should be forwarded without delay to the Central Officer.

Points of
importance.

115. The points of importance to remember are that inmates of poorhouses should not be at liberty to leave the institution at their own free will. Those who are fit to work should be drafted on to the works in the neighbourhood, and other persons should only be permitted to leave when they are put on the gratuitous relief lists in their villages or when it has been ascertained that they are no longer in need of relief. To permit people to leave otherwise than under one of the conditions above specified would be only to aggravate the difficulties attending successful famine administration, and to defeat the objects for which poorhouses are maintained. The careful watching of the physical condition of the inmates is one of the most important duties resting on all concerned. The ration is sufficient to maintain the health of those already healthy, but is usually insufficient to restore to health those who are in an emaciated or enfeebled condition. Such persons must always be given special diet and it is a matter for continual care that no one who should be on special diet is overlooked. As soon as inmates become strong enough they should be drafted on to a work, a neighbouring one if possible. The work of selection should be done regularly once a week by the visitors accompanied by the Superintendent and the Officer in Medical Charge, but every day as the visitors and Superintendent go round they should jot down in a note-book the names of people who in their opinion might be sent to a work and these names will then be considered at the next appointed day. People sent from a poorhouse to a work should invariably be given a reduced task at the beginning. Other residents of the district who can be relieved at their own homes should, if they are fit, be sent to their villages and put on the gratuitous relief lists. Residents of other States and immigrants from British Districts should be detained until arrangements can be made for sending them back to their homes.

Every inmate who can do anything should be given some employment. There will be a number of miscellaneous duties connected with the poorhouse such as grinding, cooking, drawing water, sweeping, leaping and the like, which should, as far as may be practicable, be performed by the inmates themselves. In addition cotton-ginning, spinning, rope-making, chitai-making, silk-winding and the like may also be usefully taken up.

CHAPTER VII.

Rains Policy and Closure of Relief.

General.

116. The Famine Commission of 1901 stated that in the rains the possibility of a self-acting labour test fades away while the necessity for gratuitous relief for the weak and helpless reaches its maximum. These two conditions differentiate the famine policy suitable for the monsoon period from the policy which should be followed till the rains break. The main objective is to secure the re-establishment of ordinary agricultural conditions in the interests of the country at large. For this reason it is inadmissible to disperse the people over small public works or non-departmental works near their own homes and to distribute advances for cattle and seed and donations for the same purpose from charitable funds. With reasonable caution and effective village inspection there is no risk in bringing pressure to bear on the people to leave the large works. But as it may happen that the monsoon is late in arriving it is most necessary that the administration, while ready for action on all points, should wait on events before acting. Premature action will inevitably result in a break-down of the existing machinery of relief, the people will become liable to panic, the relief centres will be rushed and, to avoid widespread suffering and mortality, the Durbar will be forced to adopt a wholesale system of gratuitous relief at great cost to themselves and at the risk of increasing demoralization of the people.

Proper policy to
be followed.

117. The Commission have described the policy to be adopted in the rains in the following words:—

“We conclude that the proper policy for the rains is to assume that events will be normal after the rains have fallen. When the monsoon has declared itself tasks may legitimately be raised in order to induce the people to return to their homes. Dependants who have returned from the works to their homes may be given gratuitous relief there. But the distribution of gratuitous relief in the rains to the able-bodied should never be repeated. If the people cling to the works, after a demand for field labour has set in, it is legitimate further to raise the task and to use pressure to get them back to their villages. A few works should always be kept open to meet any unexpected contraction in the labour market caused by, say, a temporary cessation of the rains or the substitution on a large scale of a crop requiring less labour for a crop requiring more labour. But the attempt to supplement the wages of private employers—a marked example of the extravagance to which a misuse of the gratuitous relief policy may run—should never be tried. It is no doubt true that in a year of famine the labourer receives a wage below the normal wage, but this deficiency is more than made good to him if he is relieved by the State of the support of some of his dependants. Nor should it be forgotten to what extent suspensions of revenue, liberal *takavi* advances and grants from the Charitable Relief Fund set free the capital of the country for agricultural effort.”

Treatment of
discharged relief
workers.

118. Where, owing to whatever cause, the gratuitous relief system is on a very small scale and is incapable of expansion on the general closing of works, it will be necessary to adopt some other means of enabling the people to tide over the transition period between the cessation of relief on works and the ripening of the earliest crops and natural products which can be used as food. The simplest plan is to give each head of a family either grain or cash sufficient for the household to eke out their existence for a few weeks. The workers may also be

allowed to take away with them the tools they have been using on the works. These will be invaluable to them if there has been any considerable mortality among the cattle. In the last famine hand ploughs were freely distributed in some States. The people at first objected most strongly to using them but when tactfully handled they soon came to appreciate their great value and used them freely. When hand ploughs are introduced the people on the work should be induced to practise with them close to the work under the supervision of the officials. Each gang in rotation should be set to work the ploughs for two or three days before they are allowed to leave. Once they have become accustomed to them in this way they will gladly take them to their homes and use them there.

119. As a general rule it may be laid down that if the rains have been favourable, no works should be kept open after the earliest crop is ripe and it ought generally to be possible to wind up the works earlier than this, say, by the end of August. Gratuitous relief will have to be continued longer, but as the demand for agricultural labour increases great care should be taken that no one receives relief longer than is absolutely necessary. It will be found generally that by the end of September the lists can be closed and the valedictory dole given. By the end of September it will probably have been found possible to close all the poorhouses except one or two in which there will be a certain number of beggars and a certain number under medical treatment. Poorhouses may be kept open until the autumn crop has been generally harvested; but it will be only in exceptional cases that it should prove necessary to keep them open so long. When the remaining numbers are small and consist for the most part of people under medical treatment it is better to close the poorhouse and send the patients to the local hospital for treatment. It should be remembered that all who are in receipt of gratuitous relief when relief is stopped, *i.e.*, dependants on works, those relieved at their homes whether in cash or by cooked food in kitchens, and the inmates of poorhouses should generally receive a valedictory dole which should approximately be sufficient to support the person to whom it is given for a fortnight. If the rains are favourable the middle of October should witness the end of all relief operations.

CHAPTER VIII.

Orphans.

120. The crying necessity for some special provision for orphans and children abandoned by their parents has not always been recognised. The State should be in times of famine the temporary guardian of children whom it finds deserted and should not divest itself of the care of them until a reasonable period has elapsed after the close of the famine, during which efforts should be made to discover the natural protectors of the children or, failing these, respectable persons of the same religion who are willing to adopt them. Adults may presumably be trusted to apply for relief for themselves and those dependent on them when they have come to an end of their resources, but orphans and deserted children require to be sought out. If the Durbar does not take special measures regarding them other people will. In past famines in Native States there has generally been no lack of philanthropists of different castes and creeds who took charge of deserted children and in some instances despatched them to private orphanages and homes in distant parts of the country. Their action no doubt saved the lives of many helpless children, but it gave rise to serious misunderstanding. Such agencies acted from motives of humanity, but another and very different class of persons also take an interest in orphans in a famine. It was a common experience in many States that, while every poorhouse contained an appreciable number of boys whom no one claimed, girl orphans were rarely found. There can be no doubt that many girls whose parents had disappeared were snapped up by unscrupulous agents and were consigned by them to lives of semi-domestic slavery or worse. The Chief of a State is the father of his people and the Durbar has therefore a heavy responsibility in connection with orphans. If the loss of even a square yard of territory affects the honour of a State the preventible loss of even one subject of whatever age or sex is a standing disgrace.

121. Orphans, who are not provided for in their villages, will be supported either in State orphanages or in poorhouses. In the latter case the orphans should be kept separate from the other inmates and should be treated and accounted for as if they were in a State orphanage.

The rules for the management of poorhouses should be applied, as far as possible, to State orphanages. A register should be kept up in Form No. 14; when it is proposed to remove any child from the State [Section 63 (c) of the Code] the case should be reported for the orders of the Durbar.

The Superintendent should submit every Saturday a weekly return in Form No. 15 to the District Officer, who should forward all such returns with a consolidated return to the Central Officer.

An inspection book should be kept in each State orphanage. Copies of all inspection notes recorded in it should be forwarded without delay to the Central Officer.

Members of relief committees and other respectable persons residing in the circle should be encouraged to visit State orphanages and record their impressions in an inspection book. Where possible a non-official committee, comprising gentlemen of different religions, should be appointed for every State orphanage.

122. In the case of aided or unaided private orphanages it should be obligatory on the management to maintain a register in Form No. 14 giving full particulars regarding the

Closure of relief.

Organization of Orphanages.

Private Orphanages.

children brought into the orphanage during the course of a famine and to submit a periodical report to the District Officer showing the fluctuations in the numbers relieved. Free access to the children in a private institution should at all times be given to the Local Officers and the Central Officer and to persons claiming as parents or relatives to remove the children.

Disposal of
unclaimed
children.

123. The Code provides that no unclaimed child shall be disposed of until a period of three months has elapsed since the close of relief operations. This is an important provision because in a famine a good many of the children who will come under the definition of orphans are only orphans temporarily, having been abandoned by their parents or relatives owing to the press of famine, and many of these will be claimed again when better times come. Accordingly this should always be kept in view. Deserted children should not be made over to persons or institutions of different religions until all efforts to find persons and institutions of their own religion (if this can be ascertained) willing to take charge of them have failed.

CHAPTER IX.

Special Measures of Relief.

Aboriginal
Tribes.

124. The essence of the policy to be adopted in organizing relief for aboriginal tribes is that relief must be taken to them if they are reluctant to come to it, that gratuitous relief should be liberal and that personal management should take the place of the automatic methods which govern the famine administration under ordinary conditions. The difficulties vary in proportion to the shyness of the people and the great thing is to overcome that shyness. These difficulties are largely increased when, as is usually the case, the tribes are dispersed in detached homesteads, the village officials are few and timid, outsiders are unwilling to serve in remote tracts and the local grain dealers migrate temporarily to the towns in fear of robbery. But if the officials entrusted with the organization of relief among aboriginal tribes are selected for their knowledge of, and sympathy with, the tribes, if the work exacted from the latter is suitable and if payments are made punctually every day, the relief afforded will be adequate.

Measures and
methods of
relief.

125. The following measures and methods of relief have been found to be generally necessary :—

- (a) Complete programmes of suitable works should be ready before the famine begins.
- (b) Arrangements should be complete before famine begins for the appointment of officers specially qualified to deal with the tribes.
- (c) The relief works should be numerous and near the homes of the people. They should furnish congenial employment, as far as possible, such as grass cutting and storage, wood cutting, cutting of fire lines in forests, construction of village and forest roads, village tanks, mat making, clearing jungle, manual cultivation of the fields, collection of wild produce; and from the end of April onwards the preparation of the fields and the weeding of them during the rains.
- (d) Daily payments in all cases.
- (e) Constant tours of inspection.
- (f) Liberal gratuitous help for all unable to work.

The wage scale should be fixed by the Durbar with reference to the amount of wild produce available for food and should ordinarily be that in force on village works. It should never fall below that by more than 40 per cent. It should never be altered except to meet very great changes in prices. Payment should always be made to the individual.

Great difficulty will generally be found in arranging for a regular supply of grain to inaccessible tracts inhabited by aboriginal tribes especially if there is a dearth of transport owing to mortality among the cattle and if the grain dealers have removed to the towns. In such a situation the applicants for relief can be usefully employed in carrying the grain from the nearest large market or railway station. The able-bodied of both sexes should be organized into a human transport train, their own headmen being constituted guards of the convoys. If the distance over which the grain has to be carried is very great relieving depôts must be established at periodical intervals where good water is obtainable.

Special relief to
artisans.

126. It is now admitted that it is desirable, where convenient, to relieve artisans through their own trades, one reason being that it is important to maintain all crafts by which people are supported independently of agriculture. The almost universal experience is that a carefully managed business-like scheme is not open to any of the objections usually urged against this class of relief and that it would probably not result in a greater loss to the administration than that caused by employing the artisans on the ordinary relief works. The latest Famine Commission held that the arguments in favour of this special relief were very weighty and mentioned the following :—

- (a) It is an obvious advantage to assist an existing craft which is an important factor in the industrial life of the community.
- (b) The results of such relief are marketable commodities, whereas the results of ordinary relief works are excavations or roadbanks or heaps of metal which are frequently either useless or not required except as providing work for famine labour.
- (c) Such relief is less costly than the ordinary forms of relief. In all cases special relief costs in the end, if properly managed, appreciably less than that afforded by the ordinary famine relief operations and sometimes it actually yields a net profit.

127. Special relief should be organized only when the artisans reside in considerable numbers in the same town or village, or in a group of adjacent towns or villages. The admission to special relief should be regulated by personal enquiry and selection. Organisation of special relief.

Special relief should be controlled by a qualified official, who shall, as far as possible, be assisted by non-official agency. The relief shall be, as far as possible, administered direct to the workers and not through the agency of middlemen. Under proper supervision the middleman system can be made to work well, but when supervision is at all lax the workers are sweated or cheated. Under both systems the freest use should be made of non-official agency.

Artisans admitted to special relief shall be remunerated either in accordance with the wage scale applicable to ordinary relief workers on the performance of a prescribed task, or by purchase at current rates of work done by them. If current rates are so low that an artisan cannot support himself and his family on them under the abnormal conditions of famine they may be raised to such extent as may be necessary.

If special relief is not afforded, artisans should be employed on light work, *e.g.*, carrying earth or digging soft soil, and shall, as far as possible, be specially "ganged," and be tasked with due regard to their strength, usual occupation, and mode of life.

The Central Officer should arrange for the purchase of manufactured products, at market prices, and, if necessary, for the distribution of raw material by way of advances.

The Central Officer should afterwards dispose of such manufactured products to the best advantage, crediting the sale proceeds to the Durbar or, if relief has been dispensed from any charitable fund, to such fund.

Special relief should ordinarily be administered by the Circle Inspectors who should forward every Saturday evening to the District Officer for submission to the Central Officer a return (Form No. 8) showing the numbers of persons specially relieved and the work done.

CHAPTER X.

Miscellaneous.

128. In some parts of India, as for instance Western Rajputana, there is a universal tendency of the people to emigrate at the first signs of approaching scarcity. The reasons for this old established practice are not far to seek. When the rains fail even partially the water gives out in many villages and the supply of those wells which can still be worked becomes so brackish as to be unfit for human use. Where communications also are defective a famine means the depletion of grain stores and, transport being limited, it is difficult to bring into the country sufficient food to keep the people alive. If in addition to the destruction of the crops the grass is choked by drought there is nothing for the cattle to live upon and their owners are forced by their religion as well as by self-interest to remove them beyond the famine zone. In some tracts there is a certain amount of emigration every year. Emigration from desert tracts is very difficult to observe or control, but the people who flock to more favoured parts through fairly populated territories are generally forced to confine their movements to the main lines of traffic and can be watched and enumerated on their wanderings. Migration.

Habitual emigrants accustomed to a semi-nomadic life can generally be trusted to take care of themselves but people who will not move until they feel the dire press of famine must be provided for. But the difficulties in the way of doing so are very great and are intensified by the wanderers' tendency to give false accounts of themselves from fear of deportation.

129. The most effective means of preventing emigration and aimless wandering in famine times is the maintenance in a State of a complete programme of relief works and an effective organization for providing relief as soon as it is required. The Code provides for the establishment of relief depôts or rest-houses. The importance of these institutions can scarcely be over-estimated for no class requires more careful observation at the outset of a famine than the wanderers. They are exposed to greater hardships than any other and they cause great confusion in the territories they invade. The establishment of a regular chain of depôts is the only means both of controlling and relieving both the emigrants, who know where they are going and what they want and aimless wanderers. It will be rarely necessary to open special depôts for the use of emigrants. Existing institutions and their staff can be readily utilised, such as tahsils, schools, police stations, and observation posts, hospitals, cattle pounds, village guest-houses and sarais, and even temples and mosques. These should be equipped with stores of grain and fodder and there should be in each a small stock of simple medicines. No attempt should be made to forcibly check emigration or to turn the wanderers back. The duties of the officials in charge are simply to sell to emigrants, who are able to pay, what they want in the shape of grain and fodder, to relieve the manifestly destitute, to record the volume and character of the emigration, to send early information to the authorities of the localities from which, and of the countries to which, the wanderers are moving, to tell the latter where they will probably best find what they seek and to warn them against tracts suffering from scarcity. Measures for dealing with migrants.

Foreign wanderers are regarded with dislike and suspicion and any responsibility with regard to them is rarely realized, while the presentation by a Durbar of bills for expenditure on British subjects or on those of another Durbar is a fruitful cause of friction and ill-feeling. At the same time it is not fair to expect a Durbar to spend their own funds on strangers. Where these depôts were maintained in the last famine the establishment was provided by the State in whose territories the posts were situated but all the rest of the expenditure was defrayed by the Indian Famine Charitable Relief Fund. If the practice is followed in future famines the

cost might be met by grants from the "Indian People's Famine Trust" subject to the approval of the Board of Management.

Every Superintendent of a depôt should keep a register in Form No. 16 and forward a weekly abstract of this showing weekly totals only to the District Officer for submission to the Central Officer.

Police.

130. The principal duties of the Police with reference to famine are :—

- (i) the relief of starving wanderers ;
- (ii) patrolling with the object of sweeping wanderers into the nearest poorhouses, and protecting grain in transit to the villages ;
- (iii) protection of markets and stores of grain ;
- (iv) provision of escorts for treasure remittances ; and
- (v) keeping the District Officer informed of the state of the district.

CHAPTER XI.

Cattle.

General.

131. The great mortality of cattle in recent famines has pushed to the front the question of their preservation in times of drought and dearth of fodder. In an ordinary famine, when the crops fail at a late stage of their growth there usually remain sufficient straw and grass to save, at any rate, the useful cattle, but the famine of fodder may sometimes be as complete as the famine of food grains. In either case the mortality is not confined to the useless cattle. Even when there is apparently a sufficiency of fodder the cattle die in large numbers. Much of the mortality under such circumstances is doubtless due to a deficient and polluted water-supply and much to the generally unfavourable conditions which prevail in times of famine. But whatever be the causes a certain amount of mortality accompanies every period of scarcity or famine. The best authorities have expressed their doubts as to whether any measures will prevent the death of cattle in large numbers. But it should be remembered that, while the organization of measures for the relief of human beings has been developed to a high standard of efficiency over a large part of India in recent famines, the various administrations have never had the leisure to work out schemes for cattle preservation or the establishment to carry these into execution and in some cases they have not had the necessary resources.

132. The following measures of relief are suggested for adoption and development subject to certain limitations. Some of these are more likely to be successful than others but there will generally be room for more than one of them :—

Measures of relief.

(a) *The employment from the outset of as many animals as possible on transport duties.*—

Where a State is served by a railway, and even in an outlying State,—all that it will be generally necessary for the Durbar to do is to help the grain dealers with transport. It should be possible in every State to arrange beforehand for a reserve of transport to be used by themselves and private importers when scarcity is pronounced. The transport would consist of pack bullocks and donkeys. District Officers should know what animals are available and, by enlisting the services of their owners at the very beginning of a famine, would ensure a steady supply of grain to the most remote tracts, thus preventing unrest, keeping numbers off the relief lists and saving a large number of animals from death or removal to other territories. As a rule no class suffers more in a famine, at any rate in North-Western India, than the potters, who are the hereditary village carriers, simply because their great potentialities for use at such times are not realised.

(b) *The deportation of cattle to more favoured tracts.*—No pressure should be put on the people to deport their cattle to hill jungles or forests or tracts where the climatic and other conditions are in marked contrast to the parts where they have been born and bred. The risk of mortality both in transit and after arrival is great. But from the outset the Durbars should ascertain where good grazing-under congenial conditions is available and should, if necessary, arrange with the railway authorities for the deporting of cattle at privileged rates. The centres where shelter and pasturage are to be had and the means of reaching them should be widely published and at the same time the people should be warned against such territories as they have been in the habit of resorting to in previous calamities but which are no longer able to support outside cattle. It often happens that the owners of cattle decline to trust them to the railway and they prefer to reach their objective by road. In such cases it may be necessary to provide a series of depôts for free distribution or for sale of food and fodder to emigrant parties along selected routes if no system of emigrant relief centres already exists.

(c) *Growth of fodder crops.*—This is a most valuable remedy not only because the fodder grown on the spot is much more valuable than the stuff imported, but because it has the collateral advantages of saving transport, of avoiding delays, of employing local labour and of keeping the cattle at home. Cultivators may be stimulated to grow fodder by liberal help in the form of loans to make temporary wells and by the assurance that no fodder crop will be attached for the pay-

ment of revenue. Temporary irrigation from streams by means of engine power may on emergency add largely to the fodder supply and yield a commercial profit.

- (d) *The opening of State preserves.*—The Code provides for the opening of State forests and preserves to agricultural cattle. The Famine Commission were of opinion that grazing in these preserves should not be unrestricted. Under a free grazing system there is an invasion of large numbers of useless cattle which wander about consuming grass which is wanted for more valuable beasts and trampling down more grass than they consume, while the herds do great damage by lopping and cutting down trees. It is impossible to prescribe any rules as to the conditions under which the grazing in the State preserves should be regulated. So much depends upon the decree and extent of the fodder famine that has to be relieved, the quantity and quality of grass available, the demand for grass for export, the local conditions of the preserve and many other factors which will vary not only in different parts of the country but in the same place on different occasions. As a general rule, however, the grazing in State preserves should be carefully controlled. Usually some restrictions will be found necessary. These will take the shape either of selection of cattle to be admitted or of a grazing fee or of both. It will rarely be easy to carry out in practice any system by which only valuable and strong animals will be admitted and the useless stock excluded. But it should always be possible to exclude sheep and goats. The latter in particular do incalculable damage from which it takes a forest years to recover. Sheep and goats may lose condition in a famine but they never suffer to anything like the same extent as other animals. They can subsist on natural products like the various kinds of cactus which other animals won't touch.

As to the second restriction it must be borne in mind that in the interests of both the people and the Durbar the preservation of agricultural cattle is a matter of far greater importance than any revenue which might be obtained from grazing fees. If such fees are levied at all they should be imposed on administrative grounds and not as a source of income. The most recent instructions of the Government of India on this subject are as follow:—

“The course which seems to the Government of India most generally suitable for adoption is to throw open to free grazing areas in which grazing is ordinarily permitted, and to reserve the areas which are ordinarily closed to grazing for the supply of grass for export. It may be necessary to supplement the latter by reserving portions of the former areas for grass-cutting; or it may be possible to throw open portions of the latter at once, when the supply is in excess of the demand for export. But, the needs of local cattle being provided for, the supply of grass for export should be the first consideration. When the grass has been cut from the areas thus reserved, they also may be thrown open to free grazing if necessary. Browsers should not be admitted without payment to any areas which contain forest growth of any importance, and should in no case be admitted to areas ordinarily closed to grazing. No grazing should ever be allowed in areas under plantation or regeneration unless the trees are old enough to be safe from attack. The small relief that such areas might afford is too dearly purchased by sweeping away the results of years of patient care.”

- (e) *Importation of fodder.*—The Famine Commission were of opinion that it is better and cheaper in the long run to bring fodder to the cattle than to take the cattle to fodder. The difficulties are considerable, but there is a great opening for private enterprise if aided by the Durbar. It is as a rule necessary that the State and private enterprise should co-operate, but to ensure success the demand should always be proclaimed at a very early date and the railway and road transport should be able to cope with the traffic. Hitherto the great objection to importing fodder has been its cost. To reduce the expenditure enquiries should be made in years when there is no pressure with a view to supplementing the fodder supply on an emergency.

- (f) *Utilisation of natural products.*—Owing to the conservative habits of the people it is a matter of extreme difficulty to persuade them to try new kinds of food for their cattle. The great value of the prickly pear as fodder was conclusively proved in the great Madras famine, but although this was brought to the notice of many Durbars at an early stage in the late famine, few took up the subject heartily and the people were all against the remedy. Where officials however had the energy and the patience to educate the latter the result was most striking. The prickly pear was stripped of its thorns and chopped up with a small admixture of hay or bran and salt. After a couple of days the cattle took greedily to the new food and kept their condition.

- (g) *Preservation of cattle in Camps.*—Where it is possible to save the cattle in the homes of the people it is desirable to do so, for no one will look after them so well as their owners. But when the stress is so severe that cattle are abandoned or sold for nominal sums cattle camps serve a most useful purpose in preserving valuable breeds. As the accommodation of a camp is limited and great risks are involved in overcrowding it is necessary carefully to select the cattle and admission should generally be restricted to selected cows with a few bulls of the best breeds. Experience has shown that it is better for the Durbar to buy the

cattle and re-sell them at a fair price, to their former owners, if possible, than to keep them at the risk and cost of the owners. Veterinary supervision is essential to the successful management of a camp.

Private cattle camps conducted on scientific and practical lines should be liberally supported by the Durbar. But generally those private camps do not discriminate between useful and worthless cattle. They are thus not useful from an economic point of view.

CHAPTER XII.

Medical Arrangements.

General.

133. The provision of an adequate and efficient Medical staff in affected tracts during famine is one of the most difficult questions which arises in connection with famine administration, for the supply is limited and the demand is great. The necessity for maintaining an adequate reserve of medical stores and lists of reserves of medical establishment is obvious. It was a common experience in recent famines to find that some of the most useful drugs such as quinine, permanganate of potash and dilute sulphuric acid were difficult to obtain in any very large quantities on an emergency. But in this connection it may be noted that some preparations such as Mellin's Food, which was invaluable in obstinate cases of famine diarrhoea and dysentery do not retain their properties if stored for any length of time. In view of the difficulties experienced in getting the staff, on the first appearance of distress the Principal Medical Officer should be informed of the demands for extra hands that are likely to be made on him; and he should at once make active efforts to collect them. The estimate should provide if possible one Hospital Assistant for every charge upon a large Departmental work, one for every group of small Departmental and Non-departmental works, and one for every poorhouse. It is essential that such appointments should be made directly test works are converted into regular relief works, or, in the case of poorhouses, directly the poorhouse is opened. It is also essential that the Hospital Assistants should know the language of the tract in which they are posted. The duties of the Hospital Assistant on a work are detailed in the Code, and the same rules apply to the Hospital Assistant in charge of a poorhouse. If it is found impossible to provide a Hospital Assistant for each work charge and poorhouse native private practitioners should be employed especially to attend the sick at night.

It is very important that the Principal Medical Officer or one of his subordinates should, whenever possible, visit the site of every new work before it is opened in order that, if any of the standing orders regarding water-supply, sanitation, hospital, conservancy or other matters require modification in practice owing to local conditions, he may be able to give the necessary directions before the advent of the relief workers complicates the matter.

It is important to arrange that on relief works the Hospital Assistant is subordinate to the Engineer and not to the Principal Medical Officer, except in professional matters. He is posted and transferred under the orders of the Engineer. In the case of Medical Officers employed on Civil relief operations they should be posted and transferred under the orders of the Central Officer. In every case of a transfer however, where possible, the Principal Medical Officer would naturally be first consulted; and he should be immediately informed of all transfers. The reason for these provisions is to avoid dual control, which invariably leads to bad management. But the more the Hospital Assistant is subordinated to the Public Works Department or to the Civil Department, the greater will be the need of professional supervision in professional matters. This can only be secured by active inspection on the part of peripatetic Medical Officers of a superior grade. The Principal Medical Officer should himself make flying visits to different works and poorhouses from time to time, and he should have a subordinate staff to inspect and report to him.

The position and duties of the Principal Medical Officer are explained in the Code and in all matters connected with famine relief, not of a strictly professional nature, he should consult the Central Officer.

CHAPTER XIII.

Charitable Relief Fund.

Organization and objects.

134. The necessity for the proper organization of the distribution of charitable funds subscribed by the public cannot be too strongly insisted upon. The agency selected to administer such funds should always be largely non-official. A summary of the objects on which charitable funds may usefully be expended in a famine tract will be found in Chapter XIII of the Code. This summary is not intended to be exhaustive in any way or to debar the giving of relief in such other directions as may be required by local circumstances or by the conditions under which the funds, or any part of them, have been provided. It is, however, the result of long experience and will be found useful as a guide. Primarily the object to be kept in view is that charitable relief and State relief should not overlap. The conditions under which, and

the persons to whom, State relief should be given are clearly defined in the Code, and generally speaking charitable fund money should not be expended on relief which can properly be given at the expense of the State. The Durbar, wherever possible, accepts full responsibility for the relief of distress up to the limits prescribed by the Code, but there are so many other useful objects to which the charitable funds can be directed that it would, so to speak, be a waste of the charitable funds which are so valuable to spend them where State funds can properly be utilized instead. On the other hand when the treasury is depleted owing to the remission of the greater part of the current revenue and to the heavy expenditure on relief measures, it sometimes happens that the Durbar are found to limit the wages and doles to a scale which, while sufficient to maintain life, leaves a wide margin of suffering and misery untouched. Under such circumstances the charitable relief funds are invaluable. Again it is common saying in Native States that paupers and labourers receive more help and attention under the famine relief system in vogue in British India than agriculturists in proportion to the merits and wants of the two classes. Where these ideas prevail they are reflected in the famine policy of the Durbar with the result that labourers and paupers do not get their fair share of relief. In such an event these classes have a strong claim on charitable funds.

Such funds may also be usefully spent on emigrant depôts.

It not unfrequently happens that in administering these funds an invidious distinction is made between the residents in the Khalsa, and those in the Jagir, areas, the latter being treated with much less liberality than the former. When funds have been subscribed by the public and no conditions have been attached by the donors such a differentiation is quite indefensible and all tendency in that direction should be carefully guarded against.

135. A special local fund account for charitable relief money should be opened in the head treasury in every district in which charitable funds are administered and all sums received should be credited to this account. No sums should be expended without having first been credited to the fund. If cash gifts are being made subscriptions are received in grain, they should usually be converted into cash through the agency of the Circle Inspectors, the amount realized being paid into the nearest treasury. Each Circle Inspector should keep a list of the subscriptions received in kind and the money realized by their conversion into cash. If it is more convenient to utilize grain subscriptions than to convert them into cash this may be done with the sanction of the Central Officer, the value of the grain contributed being reported for inclusion in the accounts.

Treatment of
subscriptions.

The administration of the funds should, with the consent of the Durbar, utilize as far as possible the existing agencies for State relief and in the case of objects I, II, III, and V as described in the Code no special suggestions are necessary. But the distribution of gifts made to agriculturists for the purchase of seed and cattle requires careful organization. The bulk of the charitable funds is usually devoted to this object.

136. The first thing that it is necessary to do is to endeavour to frame an estimate of the amount which will have to be given, or rather which ought to be given, to ensure the sowing of an average crop. It is difficult to lay down any general rules for the preparation of this estimate, but ordinarily it should be made out village by village with the help of the Circle Inspectors and District Officers. It may then be checked roughly by calculating the expenses of ploughing and sowing a normal crop and deducting the proportion which it may reasonably be expected, the people themselves will be able to find. It should be remembered that plough bullocks will probably be expensive and difficult to obtain, and that in many cases it will suffice to give money for the hire rather than the purchase of cattle, or camels where they are used for ploughing. Having framed the best possible estimate, the next point is to decide what proportion of the total should be given from Durbar funds and what from charitable funds. The general rule as to charitable funds, which has already been referred to, here holds good also, namely, that where, under existing rules Durbar money can be given, charitable funds should not be used. A further distinction should, however, be borne in mind, *viz.*, that the charitable funds will be ordinarily given, in gifts, whereas the State money will be given as recoverable loans, which should, however, not bear interest. The general guide will therefore be that Durbar money as loans should be given to those who can give security whether personal or otherwise, and charitable fund money as gifts to the rest. In neither case should the ordinary rules for making advances be ignored, namely, that no one is eligible who has sufficient means of his own or who can make his own arrangements for raising the necessary money himself. The estimates having been prepared, application should be made for the requisite funds. As soon as it is known what amounts will be allotted a distribution should be made by relief circles and villages in the proportion indicated by the preliminary estimates, a certain reserve being kept unappropriated for the State generally under each fund to meet unforeseen demands.

Estimate of
requirements.

137. The preparation of the lists of recipients should be begun in sufficient time for them to be completed by the end of May. The lists should be prepared as far as possible in the villages themselves, ample notice being given beforehand of the dates and places at which the list for each village will be prepared. If this is done it will usually be found that the list will be fairly complete, and that the people who are on works will go to the place appointed, for the purpose of having their names and requirements entered. This is important, as, if these people are not touched, and they are the people who will *prima facie* require assistance most, the lists will be very incomplete and trouble and confusion will be caused afterwards when the time comes to give out the money. In giving notice therefore of the time and place of preparation of the lists care should be taken that the information is made widely known on the various works. The lists should be prepared by villages in presence of the assembled

Preparation of
lists of recipients.

people of the village with their headman and local official. No written application for a loan should be required, but the headmen should marshal the people and each applicant should come forward in turn. The lists should be prepared by the Officer in Charge of the relief in the tahsil, who should be of some rank if possible; and the case of each applicant should be enquired into then and there, and, as far as may be, final orders given as to the amount which he will receive when the rains break, and he should be informed accordingly. In determining the amount, the area of cultivated land which he has, the numbers in his family, his cattle, his resources, and the security he can give should all be enquired into, and verified from the village papers and by the headmen. The greater the publicity with which the whole proceedings are taken the less the likelihood of false claims being made. The amount allotted to the village as already explained should not as a rule be exceeded without good cause, and if possible a decision should be come to then and there as to which of the applicants should receive Durbar loans, and which Charitable Fund gifts. This, however, may not be possible, and then the discrimination should be made subsequently. All the lists should be carefully scrutinized and the calculations and totals checked in office afterwards and signed by the District Officer in token of his approval. They should then be carefully kept and added to from time to time as other deserving applicants make their appearance until the rains come and the money has to be distributed. The Central Officer should be careful to see that he has plenty of money in the treasuries to meet the demand when the time comes for distribution.

System of
distribution.

138. When the lists have been prepared a programme should be drawn up and published of the manner in which the money will be distributed. This should be done by peripatetic treasuries, one of which will be sufficient for each district. For each treasury a Treasurer, possibly a clerk, two or three chaprasis, a police guard and a strong box will be required. Convenient centres will be fixed in each district at which the money will be paid out and the order in which they will be visited should be arranged and made known beforehand. In fact everything will be arranged except the actual dates of payment. A Durbar official or one of the officers who have been employed as Inspecting Officers for famine works, should be nominated in charge of each treasury, and in addition he should have with him the local official. Everything being in readiness the breaking of the rains must be awaited, and as they become established in each district the work of distribution should commence when ordered by the Central Officer. The people should now be generally informed of the dates at which they are to collect at the various centres to receive their money. They should come by villages as before accompanied by their headmen. The Officer in Charge of the party should distribute the money according to the lists prepared beforehand, while the local official may usefully be employed in investigating the cases of new-comers. Before the work of the day commences the Officer in Charge should explain to the assembled people the conditions under which the money is given, *i.e.*, as a loan or as a gift, and in addition each recipient when he gets his money should similarly be told whether he will have to repay the money or not. When a village list is taken up the people of that village should be made to sit in rows in front of the distributing officer. Immediately in front and a little at one side should stand the headmen. The people should then be called up in order, the headmen being responsible that no personation or deception is practised and each person given the amount sanctioned for him, his receipt and that of his surety, if any, being taken at the same time in the appropriate column of the register, and the payment vouched for by the initials of the disbursing officer. At the close of each day's work the accounts should be carefully checked against the amount of money paid out as ascertained from the sum in the treasury when work was started and the balance left at the close of the day.

Rate of
distribution.

139. The amount which one officer can distribute in a given time naturally depends on the size of each individual sum paid out, but not so much as one would suppose on first sight, for, in the case of the larger amounts, *i.e.*, those over Rs20, a receipt stamp has to be affixed, and in these cases more often the thumb mark of a surety will have to be obtained, all of which takes time, but on an average each disburser may be expected to pay out Rs1,000 during each hour of work. This average has often been attained in practice, and in fact an instance is known where an officer distributed somewhat more than Rs1,600 within an hour. These figures therefore serve as a guide in calculating the time which it will take to pay out the total allotment, and if the rains are late and the time available for sowing is short the number of disbursing officers should be increased. A minor point which, however, may be usefully regarded in fixing the centres for disbursement is the facilities for the purchase of seed which exist at the places selected. If the people can go straight off with the money in their hands and buy seed at once, it not only saves them time, but diminishes the chances of the money being diverted to other purposes.

The system of payment by peripatetic treasuries above detailed presupposes that the amounts to be distributed are large; in fact it should ordinarily be adopted in any district in which that amount exceeds a lakh of rupees or even Rs50,000 if the time within which the payments must be made is short.

Other methods
of distribution.

140. The method of distributing these funds described in the preceding paragraphs has been found to be the best in practice, but it may happen that the State does not possess the necessary establishment and will have to fall back on a simpler system of distribution. Whatever system is adopted it is important to secure that the distribution should be rapid and that the money should pass through as few hands as possible. In some parts of India persons selected for gifts from the charitable funds have been given cheques on local bankers to be cashed on the arrival of the rains. Nominal rolls were made out showing the names of all

persons receiving cheques with the amount of each cheque. The cheques were then made over to the recipients who were told the name of the bankers from whom, and the approximate times at which, they would receive the money. The necessary funds were sent to the bankers shortly before the rains were expected and they were required to submit accounts of the money with the original cheques as vouchers. The objections to this scheme are that it gives people who are at the end of their resources a negotiable security which they can convert at any time into cash to be spent on other objects, it puts power into the hands of the bankers and takes time. But with energetic supervision these drawbacks can be reduced to a minimum.

141. The system of advances, when administered prudently and with forethought, is a most effective instrument of relief and one which can be to a very great extent freed from the pauperizing influences of State charity. But this latter characteristic will be lost if lax notions of obligation are allowed to affect the question of the recovery of the advances. Due regard should, of course, be paid to the nature of subsequent seasons and the circumstances of the recipients, but otherwise the repayment of advances should be strictly enforced. It is even of more importance, when the preservation of self-reliance and the honesty of the people is in question to insist on the repayment of *takavi* loans than to insist on the payment of arrears of land revenue. To rescind a special contract has a more demoralizing effect upon the popular mind than to relax for once the demand of the State, to which the people are accustomed and the obligation for which is undeniable. In the interests, therefore, of public faith, which depends largely on the recognition of the obligation attaching to contracts, as well as with the object of maintaining and strengthening a spirit of independence among the people, the recovery of advances should take precedence of the recovery of arrears of land revenue in the settlement of liabilities which follows a famine.

Obligation
attaching to
advances.

FORM No. 1.

Register of persons received on the Relief Works situated at *in the* *State.*

[Paragraph 45 of the Hand-Book.]

No.	Date of admission.	Name.	Father's or husband's name.	RESIDENCE.			Caste and occupation.	Sex.	Age.	Class of work to which put.	Number of gang and mate's name.	Date of its removal and cause.
				Village.	Tahsil.	State or District.						
1	2	3	4	5	6	7	8	9	10	11	12	13

FORM No. 4.

Form of Inspecting Officer's Report.

[See Paragraph 78 of the Hand-Book.]

Note of an inspection made by _____ State
 _____ on _____ 19 ____
 Charge No. _____ . Officer in Charge _____
 Despatch to _____ as No. _____ dated _____

INSTRUCTIONS.

This form of Inspection Report is intended to have two uses. It is intended for the use of every officer who is engaged on Departmental Relief Works as a guide to the principal points of management, organization, and field accounts which require his attention and active assistance. It is intended as a form for the submission of formal inspection reports to be made from time to time on each relief charge in the manner laid down below. It is *not* intended for use as a mere vehicle of criticism.

2. Whenever an officer submits a report in this form he must devote at least one whole day to a "charge"; he must see that his facts are correct; that his counting is complete in the manner done (either by sampling gangs or by a full count); and he must record in each case the steps taken by him to remedy the defects reported. If there are serious defects, he must stay on the charge two or three days if possible and get them righted so far as practicable at the time.

Special attention should be paid to checking the accounts.

3. Each relief charge should be formally reported on in this manner about once in three weeks if possible. Full or sample counts of the workers and dependants should be taken on other occasions whenever practicable, but they need not be specially reported.

4. When a full count is taken it should be made without any warning. A whole party should be stopped, the workers and dependants given ten minutes to seat themselves, and then counted up by head and entered in a note-book ruled in lines for gangs, men, women and children. While the count of a party is in progress the workers and dependants must remain seated; as soon as it is over a second signal should be given to resume work. A full count is better directed to checking the gross numbers of gangs, men, women and children. It is impracticable to at the same time check their correct classification in the registers; this is better done during the sample counts which are made by means of the registers. Two officers working together from opposite ends of a work make a more satisfactory count than is possible by a single officer. In a tank work the whole of the people in it should be seated simultaneously.

REPORT.

General.—(a) Is the charge "open" for recruitment, or is it a "closed" charge? (b) On what work or works are the people employed? (c) Enter in the margin the reported numbers of persons present this day and for the three previous days, workers, gratuitous, total. (d) If there have been any great differences, note the explanation given by the Officer in Charge. (e) Are the numbers of persons present on other relief works in the vicinity rising, fairly steady, or falling?

I. *Future work.*—(a) How many more days' work is there here? (b) Where will the workers go next? (c) Is there enough work marked out ahead for a month?

II. *Admission.*—(a) Are the arrangements for receiving, registering, and placing new-comers in good order? Are the new-comers put in separate gangs and individually tasked? Is the task low enough at the outset, and is it gradually raised? (b) Are weakly persons put in separate gangs, or are they individually tasked and is the task low enough? What proportion do their numbers bear to the total number of workers? (c) Are immigrants kept in separate gangs? (d) Are people ineligible for relief excluded? (e) Are the numbers engaged in miscellaneous duties excessive?

III. *Conservancy.*—(a) Are yellow flags fixed at the latrines? (b) Is the surrounding ground clean? (c) Is there a staff of men to enforce conservancy rules?

IV. *Water arrangements.*—(a) Are wells selected and guarded as directed? (b) Are they disinfected regularly? (c) Are the arrangements for water carriage and distribution in proper order?

V. *Shelter.*—(a) Are there enough grass screens for those who live on the works? (b) Are they strongly made? (c) What proportion of the persons attending the works live on them?

VI. *Food supplies.*—(a) Quantity and quality. (b) Prices of some of the principal foods. (c) Does there appear to be any combination of the local men? (d) Is *kesari* being sold on the works?

VII. *Condition of the workers.*—Specially notice the condition of the weakly gangs, weakly persons individually tasked, new-comers, nursing mothers, and of children under seven years of age who have been a short time on the works.

VIII. *Kitchens.*—(a) Are the arrangements satisfactory? (b) What food is being given to adults and (c) to children? Is the food digestible?

IX. *Hospitals.*—(a) Is there a separate hospital for this charge? (b) If not, where are the sick sent to? (c) Are there isolated huts for small-pox patients? (d) Is there a spare hospital ahead ready for an epidemic? (e) What arrangements are there for discovering the sick and sending them to hospital? (f) Look into food and wages accounts of the hospital and report results. (g) Is the hospital management satisfactory?

X. *The dead.*—What are the arrangements for disposing of dead bodies?

XI. *Complaints.*—State result of enquiries into complaints made.

XII. *Difficulties.*—State any peculiar difficulties in the proper management of this charge.

XIII. *If able to make a complete count of the numbers attending this work, give a short note of the results as compared with the reported numbers.* (On such occasions it will scarcely be possible to fill in the remainder of this report, and it is not expected.)

XIV. *Daily routine.*—(a) At what hours is the mustering done? (b) At what intervals are wages paid, and (c) at what hours, and (d) by whom?

XV. *Establishment.*—(a) How many Work Agents are there, and (b) Gang Clerks? (c) Do they seem to know the rules and to understand their duties? (d) Are they all provided with huts or tents? Note any who appear to be (e) specially good men, (f) incompetent or lazy. (g) Compare the establishment attendance book with the acquittance roll. (h) Is the establishment excessive?

XVI. *The work.*—(a) Is the work on the Famine or on the Test Work system? (b) What is the task on this work? Is the work marked out in such a way that it can be understood by the people and effectively checked? (d) Do the Work Agents keep their measurement notes on the work done up to date? (e) Are the carriers correctly proportioned to the diggers? (f) What proportion of the gangs is earning the full wage? (g) What percentage of the full wage do the average earnings represent? (h) Give separate figures for able-bodied and weakly gangs and explain any remarkable figures. (i) How does the expenditure up to date compare with the sanctioned estimate? (j) How does the rate of expenditure compare with the normal petty contract rate?

XVII. *Gang registers.*—(a) Are they correctly kept? Give results of some checks.

XVIII. *Checking numbers by samples.*—(a) Muster one gang, at random, in each clerk's party on the spot and check the entries for the day. (b) Then count up the whole number of gangs on the work and estimate the number of men, women, and children by the mean numbers of the counted gangs. State the results.

XIX. *Checking accounts.*—(a) Take the checked registers to the charge head-quarters. Then compare them with the entries in clerk's books of the day and note any differences. (b) Take the complete set of clerk's books for three or four days back, and compare their totals with entries in the charge books for the same day. (c) Trace out and look into the accounts for cooked food, comparing expenditure with the number of persons being fed. (d) Examine the contingent expenditure, scrutinizing the vouchers. (e) Compare charge books with the last two or three weeks' charge progress return. (f) Check the price basis. (g) See that the cash balance is not excessive. State results.

XX. *Funds and grain.*—What are the arrangements for (a) keeping in funds and grain, (b) transport and custody of grain and coin, (c) keeping up supply of copper coin? Are they working satisfactorily?

XXI. *Fire protection.*—Are all grass huts, especially in the head-quarters' camp, protected from fire and starving cattle by mud or "cowdung leaping"?

XXII. *Stores, tools and baskets.*—(a) Are the registers in good order so that every transaction is traceable? (b) What numbers of spare picks, *phaoraks* (hammers in a stone-breaking work), and baskets are there? (c) Is anything wanting?

XXIII. *Office matters.*—If there is any unnecessary writing or account rendering, notice it here.

GENERAL REPORT.

As regards general condition and management of the works: and conduct of the Officer in charge.

(Signed) _____

NOTE.—For use this form should be printed in half margin, with sufficient space left for the Inspecting Officer's remarks.

FORM No. 5.

Register of Aided Private Works.

[See Paragraph 81 of the Hand-Book.]

Stato

District

[illegible]

A map of the State should be bound in at the end of the register, and the position of every village work entered in the register should be marked on the map by its register number, written in black figures within a red circle a quarter of an inch in diameter.

FORM No. 6.

Weekly Abstract of Non-Departmental Work Charges.

[See Paragraph 86 of the Hand-Book.]

Name and number of work _____, Village _____, Circle _____, District _____, State _____.

Estimate sanctioned for Rs. _____.

Price-basis, _____ seers per rupee.

Number of units relieved during the week.	NATURE AND QUANTITY OF WORK.			Full wages for full task.	Wages actually paid.	Cost of tools and plant.	Cost of establish- ment.*	Cost of other items.	Total expenditure of the week.	Total expenditure up to date.	INCIDENCE OF EXPENDITURE.			REMARKS.
	Nature of work.	Full task.	Work done.								Column 6 on column 4.	Column 10 on column 4.	Column 10 on column 1.	
1.	2	3	4	5	6	7	8	9	10	11	12	13	14	15

NOTE.—This form when used as an abstract should be printed on red paper; when used as a return it will be printed on white paper.

* When used as an abstract this column must be left blank as pay of establishment should be drawn upon an establishment bill form.

Signature of Manager.

FORM No. 8.

Weekly Return of Relief under Chapter V of the Code for the week ending Saturday, _____

[See Paragraphs 90 and 127 of the Hand-Book.]

Name of distributor _____ Circle _____

VILLAGE.	UNITS RELIEVED.				Cost of relief.	Work done and receipts in case any of the relieved do work.
	Men.	Women.	Children.	Total.		

NOTE.—Any receipts should be credited with the Weekly bill.

FORM No. 9.

Admission and Attendance Register.


[See Paragraph 94 of the Hand-book.]


For the month of _____, at Kitchen _____, Village _____, Circle _____, State _____.


Serial No.	Date of admis- sion.	Officer admitting	Number and date of order of ad- mission.	Name of person admitted.	Father's or hus- band's name.	Caste and sex.	Age.	Class of depend- ants.	DAYS AND MEALS OF ATTENDANCE.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Instructions.


- (a) Every month a fresh page should be opened, the serial numbers being retained. Each class should have a separate series of numbers; and blank spaces should be left for fresh admissions and for the totals of the class.
- (b) Attendance may conveniently be recorded by signs; where two meals are given daily, the following signs may be used, thus:—


Present at morning meal 


Present at morning meal 

" " evening " 

" " morning, but absent at evening meal 

Absent 

Absent at morning, but present at evening meal 

" " both meals 

- (c) The signs of attendance should invariably be written in ink.
- (d) The totals for the day may be conveniently shown as $\frac{24}{2}$ where 24 persons were present at the morning and 20 persons were present at the evening meal. The number of units for the day would then be $\frac{24+20}{2} = 22$.
- (e) If the Officer admitting is himself present, it will be sufficient if he puts his initials in column 4.
- (f) When a name is struck off, the word "kharij" or corresponding term should be entered in ink across the blank columns for "days of attendance," and the date of removal should be written in full.
- (g) The register should be closed and totalled in ink directly the roll-call is finished.

FORM No. 12.

Poorhouse Register.

[See Paragraph 103 of the Hand-Book.]

Register of daily number of persons fed at the Poorhouse at _____ in the _____ State.

Name of gangman.	Serial No.	NAME.					FED ON FOLLOWING DATES ON														
		Men.	Women.	Children.			1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	11th.	12th.	13th.	And so on.	
				10 to 14.	7 to 10.	Below 7.															
	1	Ahmad .	...	...	...	...	X														
	2	Budh Ram .	...	...	...	...	1														
	3	...	Chande .	...	...	...	X														
	4	...	...	Jot Ram .	...	...	X														
	5	...	...	...	Premi .	...	1														
	etc.	etc.	etc.	etc.	etc.	etc.															
Total of gang .																					
GRAND TOTAL .																					

(1) Each inmate fed should be entered by name in the proper column, and the total number of men, women and children in each gang and a grand total of all inmates fed on each day should be entered.
 (2) A single stroke means fed at one meal-time, a cross X means fed at both meals.

FORM No. 13.

Poorhouse Weekly Return.

[See Paragraph 113 of the Hand-Book.]

Weekly Return of the persons relieved in poorhouse, _____ State for the Week ending Saturday, the _____ 19 ____.

Date.	Men.	Women.	Children.	Total.	Expenditure, including diet and other charges,†.	Incidence of expenditure per head.	Remarks regarding general health of the poorhouse, inmates, etc.
					*		
TOTAL							
Daily average No.							

* The incidence of expenditure per head on the total expenditure for the week only should be shown.

† Including establishment charges.

(Signature.) _____

(Signature.) _____

*Superintendent, Poor-house.*_____
District Officer.

Orphanage Register.

U. S. Paragraph 121 of the Hand-Book.]

Circle, in Village—

Register of Children received in

Date and No. of admis- sion ticket.	Date of admission to orphanage.	No. in register.	Age.	Sex.	Name of child.	Name of father or mother or relation hitherto supporting the child.	Village.	Date of removal from register.	Cause of removal from register.	Name and address of the institution or person to whom the child was sent.	Conditions (if any) on which the child was sent.
1	2	3	4	5	6	7	8	9	10	11	12

FORM No. 15.

Weekly Return.

See Paragraph 121 of the Hand-Book.]

Orphanage and the number made over to parents or relations during the week

Statement showing the number of Orphans in the _____ ending _____

Statement showing the number of Orphans in care ending _____.													
RELIGION.	AT THE BEGINNING OF THE WEEK.			ADMITTED DURING THE WEEK.			MADE OVER TO PARENTS OR RELATIONS DURING THE WEEK.			REMAINING AT THE END OF THE WEEK.			REMARKS AS TO ACTION TAKEN TO DISCOVER PARENTS OR RELATIONS.
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	
Hindus . . .													
Mussalmans, &c.													
TOTAL .													

Emigrant Depôt Register.

[See Paragraph 129 of the Hand-Book.]

Register of emigrants and animals relieved in the depôt State during the week ending Saturday, the _____.

DAY.	TOTALS RELIEVED OF					EXPENDITURE ON			REMARKS INCLUDING AN ABSTRACT OF THE TOTALS FROM EACH FOREIGN STATE OR DISTRICTS.
	Men.	Women.	Children.	Total.	Animals.	Migrants.	Animals.	Total.	
1	2	3	4	5	6	7	8	9	10
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									
Saturday									
WEEKLY TOTAL .									

Signature _____

In charge of depôt.
G. I. C. P. O.—No. 1337 F. D.—26-9-1904.—200.—B. B.

Signature _____

District Officer.

